PUGET SOUND
Clean Air Agency

AIR OPERATING PERMIT

Puget Sound Clean Air Agency
1904 3rd Avenue, Suite 105
Seattle, Washington 98101

Issued in accordance with the provisions of Puget Sound Clean Air Agency Regulation I, Article 7 and Chapter 173-401 WAC.

Pursuant to Puget Sound Clean Air Agency Regulation I, Article 7 and Chapter 173-401 WAC, the Permittee is authorized to operate subject to the terms and conditions in this permit.

PERMIT NO.: 11339	**DATE OF ISSUANCE: <date>**
ISSUED TO (Permittee): Ash Grove Cement Company, Inc	
PERMIT EXPIRATION DATE: <issue + 5 yrs>	
PERMIT RENEWAL APPLICATION DUE DATE: <expiration date – 180 days>	

NAICS, Primary:	32731 Hydraulic Cement Manufacturing
Nature of Business:	Hydraulic Cement Manufacturing
Mailing Address:	3801 E Marginal Way South, Seattle WA 98106-1599
Facility Address:	3801 E Marginal Way South, Seattle WA 98106-1599
Responsible Official:	Andrew White, Plant Manager
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Puget Sound Clean Air Agency Approval:

Jon Holtom, P.E.
Engineer

John Dawson, P.E.
Engineering Manager

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Note: When viewing this permit in an electronic format, references to Specific Condition and Section numbers that are shown in **Bold** type are hyperlinks to the referenced specific conditions and/or Sections. One can navigate to that referenced location by clicking on the bolded specific condition number. One may then return to the original location by simultaneously pressing the "Alt" + "Left Arrow" keys.

Facility Description

Ash Grove Cement Company (Ash Grove) operates a Portland cement manufacturing plant.

The plant, located in the Duwamish industrial area of Seattle, King County, Washington, consists of a single dry kiln with a pre-heating/pre-calcining tower for Portland cement manufacturing. This kiln was approved for installation and installed in 1990. It has a capacity to process 92 tons per hour (2,200 tons per day and approximately 750,000 tons per year) of type I, II, III clinker.

Portland cement is the principal ingredient in concrete, which is used worldwide as the main building block of infrastructure construction as well as for commercial and residential structures. Portland cement manufacturing is an energy intensive process in which cement is made by grinding and heating a mixture of raw materials such as limestone, clay, sand, and iron ore in a rotary kiln. The kiln is a large furnace that is typically fueled by coal, oil, gas, coke and/or various waste materials. The product from the kiln, known as clinker, is cooled, ground, and then mixed with a small amount of gypsum to produce Portland cement.

Summary of Regulated Emissions Units

The following table lists the emissions units regulated in this permit by applicant identification and by PSCAA emissions unit ID number. A detailed description of each emissions unit is included in the emissions unit's respective specific conditions subsections of Section 2 of this permit, which can be quickly viewed by clicking on the EU numbers in the table. This table is for informational purposes only.

Brief Description	PSCAA ID
Rotary Cement Kiln with In-Line Raw Mill and Coal Mills	EU-1
Coal Processing, Storage and Transfer Facilities	EU-2
Material Handling Activities	EU-3
Finish Mill System	EU-4
Two Cement Domes	EU-5
Clinker Storage Shed	EU-6
Emergency Generator	EU-7

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Section 8, List of Insignificant Emissions Units and/or Activities).

Glossary

1. List of Abbreviations.

Abbreviation	Explanation
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CPIS	Chemical Procurement Information System
Ecology	Washington State Department of Ecology

Abbreviation	Explanation
EPA	Environmental Protection Agency
FCAA	Federal Clean Air Act
GHGs	Greenhouse Gases
HAP	Hazardous Air Pollutants
NESHAP	National Emissions Standard for Hazardous Air Pollutants
O&M Plan	Operation and Maintenance Plan
PSCAA	Puget Sound Clean Air Agency
PSD	Prevention of Significant Deterioration
RCW	Revised Code of Washington
RICE	Reciprocating Internal Combustion Engine
SIP	State Implementation Plan
TAP	Toxic Air Pollutant
VOC	Volatile Organic Compounds
WAC	Washington Administrative Code

2. Definitions Related to General Regulatory Order 10825 (1/28/16)

a. "*30-Day Rolling Average Emission Limit*" shall mean the maximum allowable rate of emission of a specified air pollutant and shall be expressed as pounds of such air pollutant emitted per Ton of clinker produced. Compliance with the 30-Day Rolling Average Emission Limit shall be determined in accordance with the following procedure: first, sum the total pounds of the air pollutant in question emitted from the Kiln during that Operating Day and the previous twenty-nine (29) Operating Days as measured for NO_x or SO_2, as applicable; second, sum the total Tons of clinker produced by the Kiln during the same Operating Day and previous 29 Operating Days; and third, divide the total number of pounds of the air pollutant emitted from the Kiln during the thirty (30) Operating Days by the total Tons of clinker produced by such Kiln during the same 30 Operating Days. A new compliance determination of the 30-Day Rolling Average Emission Limit shall be calculated for each new Operating Day in accordance with the provisions of this Order. In calculating each compliance determination of the 30-Day Rolling Average Emission Limit in accordance with this Order for NO_x or SO_2, the total pounds of such air pollutant emitted from the Kiln during a specified period (Operating Day or 30-Day Period) shall include all emissions of that pollutant from the subject Kiln that occur during the specified period, including emissions during each Startup, Shutdown, or Malfunction. Compliance with the 30-Day Rolling Average Emission Limits established in this Order for PM Control

Technology and Emission Limits shall be demonstrated by operating the PM CPMS at the Kiln consistent with the performance testing and continuous parametric monitoring requirements for PM Continuous Parametric Monitoring Systems in this Order.

b. "*30-Day Rolling Average Emission Rate*" shall mean the rate of emission of NO_x expressed as pounds (lbs.) per Ton of clinker produced and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Kiln during an Operating Day and the previous twenty-nine (29) Operating Days, as measured for NO_x; second, sum the total Tons of clinker produced by the Kiln during the same Operating Day and previous 29 Operating Days; and third, divide the total number of pounds of NO_x emitted from the Kiln during the thirty (30) Operating Days referred to above by the total Tons of clinker produced at such Kiln during the same 30 Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. In calculating each 30-Day Rolling Average Emission Rate, the total pounds of NO_x emitted from a Kiln during a specified period (Operating Day or 30-Day Period) shall include all emissions of that pollutant from the subject Kiln that occur during the specified period, including emissions during each Startup, Shutdown, or Malfunction.
c. "*Baghouse*" shall mean a pollution control system used for the removal and collection of Particulate Matter from Kiln flue gases.
d. "*CEMS*" or "*Continuous Emission Monitoring System*" shall mean, for obligations involving NO_x and SO_2, under this Order, the total equipment and software required to sample and condition (if applicable), to analyze, and to provide a record of NO_x and SO_2 emission rates, and the raw data necessary to support the reported emission rates, and that have been installed and calibrated in accordance with 40 C.F.R. § 60.13 and 40 C.F.R. Part 60 Appendix B and Appendix F.
e. "*CPMS*" or "*Continuous Parametric Monitoring System*" shall mean, for obligations involving PM under this Order, the total equipment and software required to establish and monitor a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit in accordance with 40 C.F.R. 63.1350 (see Specific Condition **2.84**).
f. "*Consent Decree*" or "*Decree*" shall mean Consent Decree (CD) Civil Action Case No. 2: 13-cv-02299-JTM-DJW. District of Kansas, entered on August 14, 2013, and any Appendix attached thereto.
g. "*Continuously Operate*" or "*Continuous Operation*" shall mean that when a Control Technology is used at the Kiln, it shall be operated at all times of Kiln Operation, excluding Malfunction of the Control Technology, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such Control Technology and the Kiln.
h. "*Control Technology*" shall mean Baghouse for the kiln.
i. "*Day*" shall mean a calendar day.
j. "*Demonstration Phase*" shall mean that period of time identified in Appendix A of the Consent Decree, following optimization, and at the conclusion of which, Ash Grove will propose a 30-Day Rolling Average Emission Limit for NO_x that is consistent with optimized operation of the Seattle Kiln and that will be applied in accordance with this Order and the originating Consent Decree.
k. "*Emission Limit*" shall mean the maximum allowable Emission Rate of a specified air pollutant from any Kiln and shall be expressed as pounds of such air pollutant emitted per Ton of clinker produced.
l. "*Emission Rate*" for a specified air pollutant from any Kiln shall mean the number of pounds of such air pollutant emitted per Ton of clinker measured in accordance with this Order.

m. "*Kiln*" as used in this Order shall mean a device, including any associated preheater or precalciner devices, inline raw mills, inline coal mills that produces clinker by heating limestone and other materials for subsequent production of Portland cement. Because the inline raw mill is considered an integral part of the Kiln, for purposes of determining the appropriate emissions limit, the term Kiln also applies to the exhaust of the inline raw mill.
n. "*Kiln Operation*" shall mean any period when any raw materials are fed into the Kiln and any combustion is occurring in the Kiln.
o. "*Malfunction*" as used in this Order shall have the same meaning as defined at 40 C.F.R. 60.2.
p. "NO_x" shall mean oxides of nitrogen, measured in accordance with the provisions of this Order.
q. "*Operating Day*" shall mean any Day on which Kiln Operation has occurred.
r. "*Particulate*," "*Particulate Matter*" or "*PM*" shall have the same meaning as in 40 C.F.R. Part 63, Subpart LLL.
s. "*Shut Down*" shall mean the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.
t. "*Site Specific Operating Limit*" or "*SSOL*" is the parametric limit used to monitor the operation of the particulate control device. The SSOL is also referred to as the "site specific CPMS limit" in 40 CFR Part 63 Subpart LLL. The SSOL requirements are contained in Specific Conditions **2.60** through **2.67** of this Permit.
u. "SO_2" shall mean the pollutant sulfur dioxide, measured in accordance with the provisions of this Order.
v. "*Startup*" shall mean the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.
w. "*Ton*" or "*Tons*" shall mean short ton or short tons.

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Section 1: Facility-Wide Emission Limits

The requirements in Section 1 apply both facility-wide and to the specific emission units or activities in Section 2. All requirements are federally enforceable unless they are identified as "State Only" in Specific Condition **5.31**, Tables 9 and/or 10. In the event of conflict or omission between the paraphrase in the table and the regulatory citation, the regulation cited is the enforceable requirement.

Table 1 lists the citation for the enforceable applicable requirement and the effective date in the second column. In some cases, the effective dates of the "Federally Enforceable" requirement and the "*State Only*" requirement are different because either the state (or local authority) has not submitted the regulation to the Environmental Protection Agency (EPA) for approval into the State Implementation Plan (SIP) and does not intend to, or the state (or local authority) has submitted it and EPA has not yet approved it. "*State Only*" effective dates are in italicized font and shall be understood to include the Washington Department of Ecology (Ecology) and the Puget Sound Clean Air Agency (PSCAA). When or if EPA approves the new requirement into the SIP, the old requirement will be automatically replaced and superseded by the new requirement. The new requirement will be enforceable by EPA as well as PSCAA from the date that it is adopted into the SIP, and the old requirement will no longer be an applicable requirement. In some cases, certain state rules will never be included in the SIP as they are outside EPA's authority. These include odor and nuisance types of rules.

The third column in the table is a brief paraphrase of the applicable requirement and is not enforceable.

The fourth column in the table identifies the compliance methods which include monitoring, recordkeeping, reporting and other obligations the Permittee must conduct to comply with the permit. The full compliance methods are below Table 1. Following the compliance methods is an enforceable requirement of this permit.

The reference test method is listed in the fifth column. This is the test method to be used when a compliance test is required. If a reference test method is not listed with the requirement, this means a test method is not applicable to the requirement. Reference test methods included in the permit are listed in Section 7 of the permit and include the applicable averaging period.

In the event of conflict or omission between the information contained in the third column of the table and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern.

The full text of the compliance methods referenced in column four are immediately after the table(s) in this section. The test methods and averaging periods for the reference test methods in column five are included in Section 7 of this permit.

General Facility-Wide Emission Limits

The requirements in Table 1 and the associated compliance methods and reference test methods apply facility wide.

Table 1. Facility-Wide Emission Limits

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
Common Stacks				
1.1	WAC 173-400-040(1)(b) (8/16/18)]	When two or more emissions units are connected to a common stack and the operator elects not to provide the means or facilities to sample emissions from the individual emissions units, and the relative contributions of the individual emissions units to the common discharge are not readily distinguishable, then the emissions of the common stack must meet the most restrictive standard of any of the connected emissions units	See Kiln and Coal Mill	Not applicable (N/A)
RACT Requirement				
1.2	PSCAA Reg I: 3.04(a) (7/1/12)	All emission units are required to use RACT.	No monitoring required	N/A
Opacity and Particulate Matter Standards				
1.3	PSCAA Reg I: 9.03, except for 9.03(e) (5/1/04)	Shall not emit air contaminants which exhibit greater than 20% opacity for a period or periods aggregating more than 3 minutes in any hour. This requirement does not apply when the presence of uncombined water is the only reason for the failure to meet the opacity limit.	Condition No. **1.16** Opacity Monitoring	Ecology Method 9A (See **Attachment 2. Ecology Method 9A**)

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
1.4	PSCAA Reg I: 9.09 (6/1/98)	Shall not emit particulate matter in excess of 0.05 gr/dscf from equipment used in a manufacturing process	Condition No. **5.11** Investigations and Testing	Puget Sound Clean Air Agency Method 5
Fugitive Dust Emissions Standards				
1.5	PSCAA Reg. I: 9.15 (4/17/99)	Shall not cause or allow visible emissions of fugitive dust unless reasonable precautions are employed to minimize the emissions. Reasonable precautions include but are not limited to, the following: (1) The use of control equipment, enclosures, and wet (or chemical) suppression techniques, as practical, and curtailment during high winds; (2) Surfacing roadways and parking areas with asphalt, concrete, or gravel; (3) Treating temporary, low-traffic areas (e.g., construction sites) with water or chemical stabilizers, reducing vehicle speeds, constructing pavement or rip rap exit aprons, and cleaning vehicle undercarriages before they exit to prevent the track-out of mud or dirt onto paved public roadways; or (4) Covering or wetting truck loads or allowing adequate freeboard to prevent the escape of dust-bearing materials. Compliance with the provisions of this section shall not relieve the Permittee of the responsibility of complying with Regulation I, Section 9.11	Condition Nos. **1.17** and **1.18** Facility-wide Inspections Condition No.1.19 **1.19** Complaint Response	Not applicable
1.6	WAC 173-400-040(4)(a) (9/16/18)	If engaging in materials handling, construction, demolition or any other operation which is a source of fugitive emissions, shall take reasonable precautions to prevent the release of air contaminants from the operation.	Condition No. **1.17** Facility-wide Inspections Condition No. **1.19** Complaint Response	Not applicable

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
1.7	WAC 173-400-040(3) (9/16/18, State Only)	Shall not deposit particulate matter beyond the property boundary in sufficient quantity to interfere unreasonably with the use and enjoyment of the property	Condition Nos. **1.17** and **1.18** Facility-wide Inspections Condition No.**1.19** Complaint Response	Not applicable
SO_2 Standard				
1.8	PSCAA Reg I: 9.07 (5/19/94)	Shall not emit SO_2 in excess of 1,000 ppmv (dry), 1-hour average (corrected to 7% O_2 for fuel burning equipment)	Condition **5.11** Investigations and Testing	EPA Method 6C
Hydrochloric Acid Standard				
1.9	*PSCAA Reg. I: 9.10(a) (6/9/88) (State Only)*	Shall not emit hydrochloric acid in excess of 100 ppm (dry), 1-hour average corrected to 7% O_2 for combustion sources	Condition **5.11** Investigations and Testing No monitoring required	EPA Method 26 or 26A
Other Standards				
1.10	PSCAA Reg I: 9.11(a) (4/17/99)	Shall not cause or allow the emission of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interferes with enjoyment of life and property	Condition Nos. **1.17** and **1.18** Facility-wide Inspections Condition No.**1.19** Complaint Response	Not applicable
1.11	*WAC 173-400-040(5) (9/16/18, State Only)*	Shall use recognized good practice and procedures to reduce to a reasonable minimum odors which may unreasonably interfere with any other property owners' use and enjoyment of their property.	Condition Nos. **1.17** and **1.18** Facility-wide Inspections Condition No.**1.19** Complaint Response	Not applicable
1.12	PSCAA Reg I: 6.03 (09/24/15)	It shall be unlawful for any person to cause or allow the establishment of a new source, or the replacement or substantial alteration of control equipment installed on an existing source, unless a "Notice of Construction application" has been filed and an "Order of Approval" has been issued by the Agency.	No monitoring required	Not applicable

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
1.13	PSCAA Reg I: 6.10 (07/12/01)	Where work for which an Order of Approval is required is commenced or performed prior to making application and receiving approval, the Control Officer may conduct an investigation as part of the Notice of Construction review. In such a case, an investigation fee, in addition to the fees of Section 6.04, shall be assessed in an amount equal to 3 times the fees of Section 6.04. Payment of the fees does not relieve any person from the requirement to comply with the regulations nor from any penalties for failure to comply.	No monitoring required	Not applicable
Operations and Maintenance Standards				
1.14	PSCAA Reg. I: 9.20(b) (6/9/88)	Shall maintain equipment as defined in Regulation I, Section 1.07 or control equipment not subject to PSCAA Reg I Article 6 in good working order	Condition No. **1.17** and **1.18** Facility-wide Inspections Condition Nos.**1.21**, **1.22**, **1.23**, **1.24** O&M Plan Requirements	Not applicable
1.15	PSCAA Reg I: 7.09(b) (2/1/17)	Shall develop and implement an O&M Plan to assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III. The plan shall reflect good industrial practice. It shall include the elements described in Reg. I: 7.09(b). Shall review the O&M Plan at least annually and update it as needed to reflect any changes in good industrial practice. The specific provisions of the O&M Plan shall not be deemed part of this permit.	Condition Nos. **1.21**, **1.22**, **1.24** O&M Plan Requirements	Not applicable

COMPLIANCE METHODS

Opacity Monitoring

1.16 At least once per calendar month that the facility operates, the Permittee shall conduct inspections of the facility for visible emissions. Inspections are to be performed while the equipment is in operation during daylight hours. If visible emissions other than uncombined water are observed, the Permittee shall, as soon as possible, but no later than 24 hours after the initial observation take at least one of the following response actions:

a. Take corrective action until there are no visible emissions, or
b. Record the opacity using Ecology Method 9A, or
c. Shut down the unit or activity until it can be repaired.

The Permittee shall keep records of the inspections, including date and time of inspection, the name of the person conducting inspection, the results of the inspection, the time period over which visible emissions occurred, and any corrective action conducted. For opacity monitoring using Ecology Method 9A, the Permittee is not required to comply with the test notification and reporting requirements in Specific Conditions **5.31** and **5.32**.

Failure to implement at least one of the three response actions described above in this condition within 24 hours of the initial observation shall be reported as a deviation under Specific Condition **5.5**. Additionally, an exceedance of the standard as determined using Ecology Method 9A or an exceedance of the grain loading limit using Puget Sound Clean Air Agency Method 5 shall be reported as a deviation under Specific Condition **5.5**.

The density or opacity of an air contaminant shall be measured at the point of its emission, except with the point of emission cannot be readily observed, it may be measured at an observable point of the plume nearest the point of emission.

[WAC 173-401-615(1)(b) and (3)(b)]
[PSCAA Reg I: 9.03(a), (b) & (c)]

Facility-Wide Inspections

1.17 At least once per calendar month, the Permittee shall conduct a facility-wide inspection, including the following:

a. Examine the general state of compliance with the Facility-Wide Emission Limits, listed in Table 1 and the General Applicable requirements listed in Section 6, including a check of records to determine if complaints had been received and responded to as specified in Specific Condition **1.20**;
b. Inspect the facility for odor bearing contaminants and emissions of any air contaminant in sufficient quantities and of such characteristics and duration as is, or is likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interfere with enjoyment of life and property;
c. Inspect the facility for fugitive dust and track-out while conducting activities that are likely to generate fugitive dust or track-out; and
d. Evaluate the general effectiveness of the Operation & Maintenance (O&M) Plan.

Inspections of equipment and operations shall be conducted during daylight hours. The Permittee shall initiate corrective action for any problems identified by these inspections as soon as possible, but no later than within 24 hours of identification or shut down the unit or activity until the problem can be corrected. The Permittee shall keep records of the inspections, including date and time of inspection, the name of the person conducting inspection, the results of the inspection, any corrective action conducted, and whether complaints had been received.

Failure to implement one of the response actions described above within 24 hours of the initial observation shall be reported as a deviation under Specific Condition **5.5**.

[WAC 173-401-615(1)(b) and (3)(b)]

1.18 At least once per calendar week, the Permittee shall conduct a roof top inspection. These inspections shall include inspection for odor-bearing contaminants and for fugitive emissions from any part of the facility. The inspection of the overall facility must be performed from a sufficient height to allow the determination of the point(s) of origin and possibly the cause(s) of fugitive emissions. In the event any fugitive emission release is discovered by an inspection, Ash Grove shall as soon as possible, but no later than 24 hours after discovered, begin corrective action, shut the operation down until the problem can be corrected, or report the release as a deviation as

provided in Specific Condition **5.5**. Ash Grove shall document each inspection as provided in Specific Condition **1.24**.

[WAC 173-401-615(1)(b) and (3)(b)]

Complaint Response

1.19 The Permittee shall record and investigate air pollution complaints as soon as possible, but no later than three days after receipt. The Permittee shall identify complaints regarding these emissions as follows:

a. Any emissions that are, or likely to be, injurious to human health, plant or animal life, or property, or which unreasonably interfere with enjoyment of life and property; or
b. Any emissions from fallout; or
c. Any track-out onto paved roads open to the public; or
d. Any emissions of odor-bearing air contaminants; or
e. Other emissions.

The Permittee shall investigate the complaint and determine if there was noncompliance with an applicable requirement of this permit. If it is determined to be noncompliance, the Permittee shall initiate corrective action for the problem as soon as possible but no later than within 24 hours of determination or shut down the noncompliant operation until it is repaired or corrected. Failure to implement corrective action or else shut down the unit/activity within 24 hours of initial observation of noncompliance shall be reported as a deviation under Specific Condition **5.5**.

1.20 Records for all complaints received concerning odor, fugitive emissions or nuisance must contain the following information:

a. The date and time of the complaint,
b. The name of the person complaining, if known,
c. The nature of the complaint, and
d. The date, time and nature of any corrective action taken.

[WAC 173-401-615(1)(b)]

Maintenance and Repair of Emission Units

1.21 The Permittee shall use good industrial practices to maintain all equipment with the potential to emit air pollutants in good working order, including insignificant emission units and equipment not listed in this permit. For such equipment, the Permittee shall also promptly repair defective equipment. Good industrial practices may include following the manufacturer's operations manual or an equipment operations schedule, minimizing emissions until the repairs can be completed and taking measures to prevent recurrence of the problem.

[WAC 173-401-615(1)(b)]

Operation and Maintenance (O&M) Plan Requirements

1.22 The Permittee's O&M Plan shall include procedures specifying how the Permittee will assure continuous compliance with Puget Sound Clean Air Agency Regulations I, II and III. The O&M Plan shall be reviewed by the Permittee at least annually and updated to reflect any changes in good industrial practice. The Plan shall include, but is not limited to, the following:

a. Periodic inspection of all equipment and control equipment;
b. Monitoring and recording of equipment and control equipment performance;
c. Prompt repair of any defective equipment or control equipment;
d. Procedures for startup, shut down, and normal operation;
e. The control measures to be employed to assure compliance with the requirements of this permit; and

f. A record of all actions required by the plan.
g. Methods used to minimize emissions during startup and shut down, including those recommended by the manufacturer.

[Puget Sound Clean Air Agency, Regulation I, Section 7.09(b)]
[WAC 173-401-615(1)(b)]

1.23 The O&M plan shall reflect good industrial practice. In most instances, following the manufacturer's operations manual or equipment operational schedule, minimizing emissions until repairs can be completed and taking measures to prevent a recurrence of the problem may be considered good industrial practice. Determination of whether good industrial practice is being used will be based on available information such as, but not limited to, monitoring results, opacity observations, review of operations and maintenance procedures, and inspections of the emission unit or equipment. The Permittee shall use the results of the inspections required by this permit in its annual review of the O&M Plan. The specific provisions of the O&M Plan, other than those required by this permit, shall not be deemed part of this permit. For insignificant emission units, the O&M Plan shall refer to the requirements stated in Specific Condition **1.22** of this permit.

[Puget Sound Clean Air Agency, Regulation I, Section 7.09(b)]
[WAC 173-401-615(1)(b)]

1.24 The Permittee shall document all inspections, tests, and other actions required by the O&M Plan, including the name of the person who conducted the inspection, tests or other actions; and the date and the results of the inspection, tests or other actions including corrective actions. The Permittee shall maintain records of all inspections, tests, and other actions required by the O&M Plan on site and available for Puget Sound Clean Air Agency review.

[Puget Sound Clean Air Agency, Regulation I, Section 7.09(b)]
[WAC 173-401-615(1)(b)]

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Section 2: Emission Unit Specific Applicable Requirements

The requirements in Section 2 apply only to the emission units or activities listed in this section. . All requirements are federally enforceable unless they are identified as "State Only" in Specific Condition **5.31**, Tables 9 and/or 10. In the event of conflict or omission between the paraphrase in the table and the regulatory citation, the regulatory citation is the enforceable requirement.

Tables in this section list the citation for the enforceable applicable requirements and the effective dates in the second column. All requirements are federally enforceable unless they are identified as "*State Only*".

The third column in the tables is a brief paraphrase of the applicable requirement and is not enforceable.

The fourth column in the tables identifies the compliance methods which include monitoring, recordkeeping, reporting and other obligations the Permittee must conduct to comply with the permit. The full compliance methods are immediately after each of the tables in this section. Following the compliance methods is an enforceable requirement of this permit.

The reference test method is listed in the fifth column. This is the test method to be used when a compliance test is required. In some cases where the applicable requirement does not cite a test method, one has been added. Reference test methods included in the permit are listed in **Section 7: Test Methods and Averaging Periods** and include the applicable averaging period.

In the event of conflict or omission between the information contained in the third column of the tables and the actual statute or regulation cited in the second column, the requirements and language of the actual statute or regulation cited shall govern.

Emission units and activities in place at the time of permit issuance are listed in the tables in this section. These do not include insignificant emission units (See **Section 8: Insignificant Emission Units and Activities** of this permit).

The full text of the emission unit specific compliance methods referenced in column four are immediately after the table(s) in this section. The test methods and averaging periods for the reference test methods in column five are included in Section 7 of this permit.

Note: When viewing this permit in an electronic format, references to Specific Condition numbers that are shown in **Bold** type are hyperlinks to the referenced specific condition. The reader can navigate to that referenced condition by clicking on the bolded condition number. The reader may then return to the original location by simultaneously pressing the "Alt" + "Left Arrow" keys.

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A. Emission Unit No. 1: Rotary Cement Kiln with In-Line Raw Mill and Coal Mills.

The requirements in Table 2 apply to Emission Unit No. 1, the rotary cement kiln with in-line raw mill system, clinker cooler and coal mills.

This emission unit consists of a nominal 92-ton/hour (2,200 ton/day, 750,000 ton/year) capacity rotary Portland cement kiln and in-line raw mill, primarily fired with natural gas at this time, but also with whole tires and permitted to fire coal.

In addition, this emissions unit includes one MB America model BF 120.4 S2 crusher bucket rated at 65 yd^3/hr for crushing of kiln refractory brick, kiln coating (clinker), and raw mill rejects (oversize limestone), and finish mill (oversize clinker) rejects. The crusher bucket is an attachment for a backhoe or skid loader. When used for raw mill rejects, it's considered part of the raw mill. When used for refractories or finish mill rejects, it's considered part of the finish mill. Oversize materials are >3" in diameter.

The allowable fuels permitted for use in the kiln include natural gas, bituminous coal, whole tires, and a small amount of internally generated waste lubricating oils and greases. Coal and waste oils have not been combusted since 2016 and Ash Grove has no immediate plans to do so again. However, Ash Grove retains the ability to fire these fuels; therefore, the requirements for coal processing, handling and firing are included in this permit. Whole tires can only be injected into the calciner level of the preheater tower above the kiln. The amount of whole tires is defined by the fuel monitoring plan that the permittee is required to prepare and submit to the agency for approval.

While the kiln system is equipped to reduce emissions of Nitrogen Oxide (NO_X) through the use of selective non-catalytic reduction (SNCR) by injecting ammonia into the gas stream near the calciner, this system is typically only needed to meet the NO_X emissions limit when firing coal.

Particulate matter emissions from the kiln are controlled by a nominal 185,000 acfm Dustex 10-module pulse jet baghouse (the "Main Kiln Baghouse"). The Dustex fabric filter has a differential pressure transmitter for continuous monitoring of the pressure differential across the filter bags.

The main stack emissions are monitored for opacity (VE), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur dioxide (SO_2), mercury (Hg), and total hydrocarbons (THC) emissions by continuous emission monitoring systems. Also a particulate matter continuous parametric monitoring system (PM CPMS) is utilized, along with oxygen, stack flow rate, and baghouse inlet temperature monitors.

Currently, the kiln emissions exit from the kiln/raw mill through the main stack. If coal firing is ever resumed, a small portion of the hot kiln exhaust gases will be routed directly from the kiln exhaust to the coal mills for use in thermally drying coal prior to grinding. At such time, each coal mill is controlled by a nominal 10,400 acfm baghouse. This emission unit includes requirements for the coal mills because a small portion of kiln exhaust gases vent to the atmosphere through the coal mill baghouse stacks when coal is processed for combustion.

The kiln, clinker cooler, raw mill system, raw mill dryer, raw material storage, are subject to 40 CFR 60, Subpart A – General Requirements and Subpart F - Standards of Performance for Portland Cement Plants. The kiln and in-line coal mill, clinker cooler, raw mill system and raw material dryer, are also subject to 40 CFR 63, Subpart A – General Requirements and Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (the raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading, and unloading systems are not subject to Subpart LLL because this facility is not a major source of HAP). The coal processing system is subject to 40 CFR Subpart A – General Requirements and Subpart Y - Standards of Performance for Coal Preparation and Processing Plants.

In addition to the applicable requirements listed in this section, the rotary cement kiln with in-line raw mill system, clinker cooler and coal mills are also subject to the plant-wide requirements in Section 1. of this permit.

The main kiln stack is 272' tall, has an exit diameter of 13', stack gas flow rates of 165,000 scfm and 235,000 acfm, and an exit temperature of up to 350 °F.

Table 2. Applicable Requirements Related to Rotary Cement Kiln with In-Line Raw Mill and Coal Mills

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.1	Puget Sound Clean Air Agency Condition 1 of Order of Approval Nos.: 5687 (1/11/95); 6644 (10/18/96); 11436 (11/14/17); 11681 (4/8/19); 11983 (4/29/22); 12003 (12/5/2024)	The Permittee is authorized to operate and maintain only the devices or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by Orders of Approval (OA) Nos. 5687, 6644, 11436, 11681, 11983 and 12003	Construction Records See Specific Conditions below.	N/A
2.2	Puget Sound Clean Air Agency Reg. I: 9.04(c)(1) (5/01/04)	The Permittee shall not cause or allow the emission of any air contaminant (as determined by the COMS) from the **kiln stack** or **clinker cooler** during any hour that averages greater than 5% opacity as a one-hour average.	Continuous Opacity Monitoring System (see Specific Condition **2.47**) Puget Sound Clean Air Agency Reg. I: 9.04(b)	EPA Performance Specification 1 (40 CFR 60, Appendix B)
2.3	Puget Sound Clean Air Agency Reg. I: 9.04(c)(2) (5/01/04)	The Permittee shall not cause or allow the emission of any air contaminant (as determined by the COMS) from the **kiln stack** or **clinker cooler** during any hour that contains any consecutive 6-minute period averaging greater than 20% opacity.	Continuous Opacity Monitoring System (see Specific Condition **2.47**) Puget Sound Clean Air Agency Reg. I: 9.04(b)	EPA Performance Specification 1 (40 CFR 60, Appendix B)
2.4	Puget Sound Clean Air Agency Order of Approval No. 5687 Condition 4 (1/11/95)	The Permittee shall burn only waste derived fuels generated on site and not to exceed 6,000 pounds of greases and 4,800pounds of oils per year.	Fuel sample and records	NA
2.5	Puget Sound Clean Air Agency Order of Approval No. 5687 Condition 5 and 6 (1/11/95)	The Permittee shall limit waste derived fuels to those that are non-hazardous as defined by WAC 173-303-515, Special Requirements for Used Oil Burned for Energy Recovery, or by WAC 173-303-090 Dangerous Waste characteristics, as appropriate	Fuel sample and records (See Specific Condition **2.100**)	NA

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.6	Puget Sound Clean Air Agency Order of Approval No. 12003 Condition 3 (12/05/25)	Ash Grove shall measure and record, each calendar day, the total weight of whole tires injected as non-hazardous secondary material fuel as defined by 40 CFR 241.4(a)(1).	Daily records. (See Specific Condition **2.100**) (See Specific Condition **2.101**)	NA

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.7	Puget Sound Clean Air Agency Order of Approval No. 12003 Condition 4 (12/5/25) Puget Sound Clean Air Agency Order of Approval No. 12003 Condition 5 (12/5/25)	The Permittee shall submit and follow a fuel monitoring plan. This plan shall include the maximum rate of whole tires the Permittee may use. A study shall be conducted to determine if a rate of whole tires above 30% of fuel by weight leads to an increase in TAPs determined by Appendix C to 40 CFR Part 60. Prior to the results of this study, and if the study determines that it is an increase, the tire usage shall be limited to 30 percent	Daily records. (See Specific Condition **2.100**) See Specific Condition **2.102**	NA
2.8	Puget Sound Clean Air Agency Order of Approval No. 11983 Condition 3 (4/29/22)	There shall be no visible detached plume from the main cement kiln stack.	Monthly visual observations for detached plumes while the SNCR is in operation during daylight hours (see Specific Condition **2.46**) Monthly visual observations are not required if electing to comply with Condition 2.9 instead of Condition 2.8.	NA
2.9	Puget Sound Clean Air Agency Order of Approval No. 11983 Condition 4 (4/29/22)	As an alternative to complying with Specific Condition **2.8**, the ammonia slip shall not exceed 10 ppmvd (@7% oxygen, 3-hr average).	Ammonia slip shall be determined either by an ammonia CEMS or stack tests conducted at least once every 12 months.	Performance Specification 15 40 CFR 60 Appendix B BAAQMD Method ST-1B, EPA Method CTM-027, or EPA Method 320
2.10	Puget Sound Clean Air Agency Order of Approval No. 11436, Condition 3 (11/14/17) Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 3 (4/8/19)	The crusher bucket is subject to NSPS Subparts F and A. This emissions unit is subject to Subparts A, F and Y of 40 CFR Part 60 and Subpart LLL of 40 CFR Part 63	See compliance conditions below.	

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.11	**Opacity:** Puget Sound Clean Air Agency Order of Approval No. 11436 Conditions 5 & 6 (11/14/17) 40 CFR 60.62(c)	**Crusher Bucket** Opacity from the crusher bucket shall not exceed 10%	As measured using EPA Method 9 and as outlined in NSPS Subparts F and A (See Specific Conditions **2.178** through **2.181)**	EPA Method 9
2.12	**PM_{10}:** Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 4 (4/8/2019)	**Baghouses (except Main Kiln Baghouse)** PM_{10} emissions from each baghouse, except the main kiln baghouse, shall not exceed 0.005 grains/dscf over a 24-hour period.	See Specific Condition **2.57**	See Specific Condition **2.57**

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.13	**Carbon Monoxide (CO):**	**Main Kiln Baghouse/Stack**		
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 5.a. (4/8/19)	Except during startup and shutdown of the kiln, scheduled maintenance, and for emissions considered unavoidable under WAC 173-400-107, CO emissions from the main baghouse shall not exceed the most stringent of PSD limits or the following limits: 1,049 ppmvd @10% O_2 for an 8-hour average. and 2,353 ton/yr	Continuous Emission Monitoring	EPA Method 10 (40 CFR Part 60, Appendix A, July 1, 2021)
	PSD Permit 90-03, Amendment 3, Condition 3 (10/8/01)	CO emissions from the system exhaust stack shall not exceed 1,045 ppmvd corrected to ten percent oxygen and standard dry conditions or 538 pounds per hour on an eight hour average. CO emissions from the system exhaust stack shall not exceed an annual emissions limit of 2,353 tons per year based upon 8,760 hours of operation per year.	Continuous Emissions Monitoring whenever the kiln is operating, other than during pre-heating	40 CFR 60, Appendix B, Performance Specification 4

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.14	**Nitrogen Oxides (NO_X):**	**Main Kiln Baghouse/Stack**		
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 5.b. (4/8/19)	Except during startup and shutdown of the kiln, scheduled maintenance, and for emissions considered unavoidable under WAC 173-400-107, NO_X emissions from the main baghouse shall not exceed the most stringent of PSD limits or the following limits: Nitrogen oxides (NOx) emissions shall not exceed 650 ppm corrected to 10% O2 as a 24-hour rolling average, and NOx emissions shall not exceed 1846 tons as a 12-month running total; and if the NOx emissions exceed 1400 tons as a 12-month running total, Ash Grove shall notify the Puget Sound Clean Air Agency (Attn: Facility Submittal) describing actions that will be implemented to assure compliance with the annual NOx limit..	NO_X continuous emissions monitoring system (CEMS) at the Main Kiln Stack and Determination of daily clinker production rate (See Specific Conditions **2.48 - 2.52)**	Performance Specification 2 40 CFR 60 Appendix B EPA Method 7E (40 CFR Part 60, Appendix A, July 1, 2021)
	GRO 10825, Conditions 3, 7 & 11 (1/28/16); Puget Sound Clean Air Agency Order of Approval No. 11983 Conditions 5 and 6 (4/29/22)	Ash Grove shall maintain compliance with the 30-Day rolling average emission limit for NO_X of 5.1 lb NO_X/ton clinker at the Seattle Kiln. Ash Grove need not demonstrate compliance at the stack venting exhaust gases from the Seattle coal mill. However, Ash Grove shall control indirect-fired coal mill feed gas from the kiln exhaust according to the standard protocol of the coal mill system. Ash Grove shall not adjust, increase, or activate the coal mill feed gas in order to affect the emissions at the main stack in any way.	NO_X CEMS (See Specific Conditions **2.48 - 2.52)**	
	PSD Permit 90-03, Amendment 3, Conditions 1 and 7 (10/8/01)	NO_X emissions from the system exhaust stack shall not exceed 650 ppm corrected to ten percent oxygen and standard dry conditions on a 24-hour average. NO_X emissions from the system exhaust stack shall not exceed an annual emission limit of 1,846 tons per year based upon 8,760 hours of operation per year.	NO_X emissions shall be measured by a continuous emissions monitoring system whenever the kiln is operating.	40 CFR 60, Appendix B, Performance Specification 2

2.15	**Sulfur Dioxide (SO_2)**:	**Main Kiln Baghouse/Stack**		
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 5.c. (4/8/19)	Except during startup and shutdown of the kiln, scheduled maintenance, and for emissions considered unavoidable under WAC 173-400-107, SO_2 emissions from the main baghouse shall not exceed the most stringent of PSD limits or the following limits: 180 ppmvd at 10% O_2 as a one1-hr average, and 176 ton/yr	Continuous Emission Monitoring (See Specific Conditions **2.53 - 2.56)**	EPA Method 6C (40 CFR Part 60, Appendix A, July 1, 2021)
	GO 10825, Conditions 12 & 13 (1/28/16}	Ash Grove shall maintain compliance with the 30-Day Rolling Average Emission Limit for SO_2 of 0.4 lbs. SO_2/Ton of clinker. Ash Grove need not demonstrate compliance with the 30-Day Rolling Average Emission Limit for SO_2 at the stack venting exhaust gases from the coal mill. However, Ash Grove shall control indirect-fired coal mill feed gas from the kiln exhaust according to the standard protocol of the coal mill system. Ash Grove shall not adjust, increase or activate the coal mill feed gas in order to affect the emissions at the main stack in any way.	CEMS in accordance with 40 CFR 60. Ash Grove is not required to install and operate SO_2 CEMS on the stacks of the indirect fired coal mills.	
	PSD Permit 90-03, Amendment 3, Condition 2 (10/8/01)	SO_2 emissions from the system exhaust stack shall not exceed: a. 180 ppm corrected to 10 percent oxygen and standard dry conditions on an hourly average, except during periods of start-up preheat, start-up and shutdown of the kiln, and during scheduled maintenance of the main baghouse, b. During the kiln startup feed introduction period SO_2 emissions from the system exhaust stack shall not exceed 200 ppmvd corrected to 10 percent oxygen and standard dry conditions on an hourly average. c. During the kiln start-up pre-heating period, shut down of the kiln, and during scheduled maintenance of the main baghouse, the SO_2 limit shall consist of compliance with the following work practices and conditions: 1) Only natural gas shall be used as fuel during the kiln start-up pre-heating period. 2) Sulfur rings shall be removed from the kiln prior to start-up if sulfur ring formation had required the kiln to be shut down, and 3) The kiln shall be operated in accordance with all PSCAA operation and maintenance requirements.	Continuous Emissions Monitoring whenever the kiln is operating, other than during pre-heating.	

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
		SO_2 emissions from the system exhaust stack shall not exceed an annual emission limit of 176 tons per year based on 8,760 hours of operation per year.		

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.16	**Particulate Matter (PM):**	**Main Kiln Baghouse/Stack**		
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 4. (4/8/19)	3.PM-10 emissions from each baghouse, except the main kiln baghouse, shall not exceed 0.005 grains/dscf over a 24-hour period. Ash Grove may demonstrate compliance with any of the following methods: Performing a Puget Sound Clean Air Agency-approved source test according to EPA Method 5 or EPA Method 201A; Demonstrating no visible emissions for 15 consecutive seconds; Demonstrating no visible emissions for three consecutive minutes; or Repairing within 24 hours, any baghouse that has visible emissions for more than three consecutive minutes. The Puget Sound Clean Air Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107	Opacity observation	EPA Method 22
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 5.d. (4/8/19)	Except during startup and shutdown of the kiln, scheduled maintenance and emissions considered unavoidable under WAC 173-400-107, PM emissions from the main baghouse shall not exceed the most stringent of PSD limits or the following limits: 10.6 lb/hr, and 46 tpy.	PM Monitoring Main Baghouse PM CPMS (See Specific Condition **2.65**)	EPA Method 5 or EPA Method 201A (40 CFR Part 60, Appendix A, July 1, 2021)
	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 6.(4/8/19)	Particulate matter (PM) emissions shall not exceed 0.07 lb/ton clinker on a 30-day rolling average.		
	GO 10825, Condition 17 (1/28/16}	Ash Grove shall maintain compliance with the PM limit of 0.07 lbs. PM/Ton of clinker.	PM CPMS (See Specific Condition **2.60**).	EPA Method 5 or 5I (See Specific Conditions **2.58** & **2.59**)
	40 CFR 60.62(a)(1)(i)	You may not discharge into the atmosphere from any kiln any gases which contain particulate matter (PM) in excess of 0.30 pounds per ton of feed (dry basis) to the kiln.	PM CPMS (See Specific Condition **2.60**).	Annual EPA Method 5 or Method 5I
	40 CFR 63.1343(b)(1)1 & (b)(2). 40 CFR 60.62(b)(3)	0.07 lb PM/ton clinker Includes emissions from the Coal Mill stack, when used. (See Specific Condition **2.35** for alternative PM limit when kiln emissions include clinker cooler exhaust.)	PM CPMS (See Specific Condition **2.60**).	EPA Method 5 or 5I and consist of three test runs.

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.17	Puget Sound Clean Air Agency Order of Approval No. 11681, Conditions 8.& 9. (4/8/19)	During startup and shutdown of the kiln, and during scheduled maintenance on the main kiln baghouse, all of the emission limits stated in Condition Nos. **2.13**, **2.14**, and **2.15** apply, except that emissions from the main kiln stack shall not exceed the following limits: a. During the kiln startup-preheating period prior to kiln feed introduction, the SO_2 emission limit for the main kiln stack shall consist of compliance with the following work practices and fuel restrictions: i. Only natural gas shall be used as fuel and the facility must comply with the start-up and shutdown requirements outlined in 40 CFR Part 63.1346 (g) (see Specific Condition **2.39**), and ii. Sulfur rings shall be removed from the kiln prior to startup, if sulfur ring formation had required the kiln to be shut down. b. During the kiln startup-feed introduction period, SO_2 emissions from the main kiln stack shall not exceed 200 ppm corrected to 10% O_2 for a one-hr average. Any shutdown of the kiln shall follow the normal rotation and cool down procedures and remove as much material from the kiln as possible without damaging system components.	II.B.8 Kiln Work Practice Monitoring (See Specific Condition **2.18**)	N/A
2.18	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 10 (4/8/2019)	Ash Grove shall log as part of the Operations and Maintenance Plan and report to the Puget Sound Clean Air Agency as part of the monthly Continuous Emission Monitoring Report: a. The date, start and end times, and the fuel used for kiln startup-preheating periods prior to feed introduction; b. The sulfur ring removal from the kiln, if the ring formation required the kiln to be shut down; c. The date, start and end times for kiln startup-feed introduction periods; and d. The cause for kiln shut down, the duration of kiln cool down and the kiln rotation schedule in kiln cool down.		

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.19	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 11 (4/8/2019)	Ash Grove shall monitor and report CO, NO_X, SO_2, and opacity emissions from the main kiln baghouse according to Article 12 of Regulation I. SO_2 emissions from the main stack shall be monitored at all times following the introduction of feed to the kiln.	(See Specific Condition **2.96**)	
2.20	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 12 (4/8/2019)	Ash Grove shall monitor and report PM emissions from the main kiln baghouse according to Regulation I Article 12.03 (d), 12.03 (e), and 12.03 (f)(1-3).	(See Specific Condition **2.96**)	
2.21	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 13 (4/8/2019)	Main kiln baghouse shall be operated continuously while the kiln is in operation.	(See Specific Condition **2.36**)	
2.22	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 14 (4/8/2019)	The differential pressures across the baghouse shall be maintained according to the manufacturer's recommended design minimum and maximum differential pressure. The established manufacturer's design minimum and maximum differential pressures must be clearly marked nearby the monitoring interfaces of the baghouse.	(See Specific Condition **2.37**)	
2.23	Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 15 (4/8/2019)	Records of all baghouse inspections, corrective actions, and logs shall be maintained for at least five years and made available to Puget Sound Clean Air Agency personnel upon request.	(See Specific Condition **2.99**)	

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.24	**Dioxins and Furans** 40 CFR 63.1343(b)(1)1.	**Kiln** Emissions of Dioxins and Furans (D/F) shall not exceed 0.2 ng/dscm (TEQ), corrected to 7% O_2. If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less, this limit is changed to 0.40 ng/dscm (TEQ). Note: *TEQ* means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989. The 1989 Toxic Equivalency Factors (TEFs) used to determine the dioxin and furan TEQs are listed in Table 2 to Subpart LLL of Part 63. Link to Table 2 to Subpart LLL of Part 63	CEMS (See Specific Condition **2.86**)	EPA Method 23 (40 CFR Part 60, Appendix A, July 1, 2021)
2.25	**Mercury** 40 CFR 63.1343(b)(1)1.	**Kiln** Emissions of Mercury shall not exceed 55 lbs/MM tons of clinker	CEMS (See Specific Condition **2.89**)	EPA method 30B (40 CFR Part 60, Appendix A, May 30, 2023) PS-12A (40 CFR Part 60 Appendix F, October 16, 2025)
2.26	**Total Hydrocarbons** 40 CFR 63.1343(b)(1)1.	**Kiln** Emissions of Total Hydrocarbons (THC) shall not exceed 24 ppmvd corrected to 7% O_2, measured as propane. You may elect to meet an alternative limit of 12 ppmvd for total organic HAP.	CEMS (See Specific Conditions **2.87** & **2.88**)	PS-8 (40 CFR Part 60 Appendix F, October 16, 2025) EPA Method 25C EPA Test Method 320 or Method 18 of appendix A to this part or ASTM D6348-03

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.27	**Total Hydrocarbons** 40 CFR 63.1343(b)(1)11.	**Raw Material Dryer – Normal Operations** Emissions of Total Hydrocarbons (THC) shall not exceed 24 ppmvd, measured as propane. You may elect to meet an alternative limit of 12 ppmvd for total organic HAP.	CEMS (See Specific Conditions **2.87** & **2.88**	PS-8 (40 CFR Part 60 Appendix F, October 16, 2025) EPA Method 25C EPA Test Method 320 or Method 18 of appendix A to this part or ASTM D6348-03
2.28	**Total Hydrocarbons** 40 CFR 63.1343(b)(1)12.	**Raw Material Dryer – Startup & Shutdown** Work practices (63.1348(b)(9))	See Specific Condition **2.42**	
2.29	40 CFR 63.1348(d) (7/1/2021)	At all times the Permittee must operate and maintain emission Unit 1, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Puget Sound Clean Air Agency 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.		
2.30	**Particulate Matter (PM):** 40 CFR 60.252(a)(1)	**Coal Mill – Thermal Dryer** The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which contain PM in excess of 0.070 g/dscm (0.031 grains per dry standard cubic feet (gr/dscf))	Annual PM Stack Test (when coal is used) (See Specific Condition **2.69**)	EPA Method 5 or 5I (See Specific Conditions **2.58** & **2.59**)
2.31	**Opacity** 40 CFR 60.252(a)(2) 40 CFR 60.255(a)	**Coal Mill – Thermal Dryer** The owner or operator shall not cause to be discharged into the atmosphere from the thermal dryer any gases which exhibit 20 percent opacity or greater.	Opacity Test. Must conduct all performance tests required by 40 CFR 60.8 to demonstrate compliance with the applicable emission standards using the methods identified in 40 CFR 60.257 (see Specific Condition **2.133**)	EPA Method 9

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.32	**Temperature Monitoring** 40 CFR 60.256(a)(1)(i) 40 CFR 60.256(a)(2)	**Coal Mill – Thermal Dryer** The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate a monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis.	The temperature monitoring device is to be certified by the manufacturer to be accurate within ±1.7 °C (±3 °F) and shall be recalibrated annually in accordance with procedures under 40 CFR 60.13(b)	
2.33	**PM** 40 CFR 60.62(b)(1)(iii) & (b)(2)	**Clinker Cooler** You may not discharge into the atmosphere from any clinker cooler any gases which contain 0.1 lb/ton of feed (dry basis) If the kiln and clinker cooler exhaust are combined for energy efficiency purposes and sent to a single control device, the appropriate kiln PM limit may be adjusted using the procedures in 40 CFR 63.1343(b). (See Specific Condition **2.35**)	Stack test	Method 5 or 5A
	40 CFR 63.1343(b)(1)7	0.07 lb/ton of Clinker during normal operations	PM CPMS (See Specific condition **2.84**)	
	40 CFR 63.1343(b)(1)8.	PM emissions limited to proper work practices during startup and shutdown.	Work Practices (See Specific Condition **2.42)**	
2.34	**Opacity** 40 CFR 60.62(b)(1)(iv)	**Clinker Cooler** You may not discharge into the atmosphere from any clinker cooler any gases which contain greater than 10% opacity. Except that this opacity limit does not apply if/when the clinker cooler exhaust is combined with the main kiln exhaust, which uses a PM continuous parametric monitoring system (CPMS).	Opacity test	Method 9

2.35 Alternative PM Emissions Limit. The combined PM emissions from the kiln and the inline coal mill stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust and coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using the following equation (40 CFR 63, Subpart LLL, Equation 1.):

$$PM_{alt} = (0.0060 \times 1.65)\ (Q_k + Q_c + Q_{cm})/(7{,}000)$$

Where:

PM_{alt} = Alternative PM emission limit for commingled sources.

0.0060 = The PM exhaust concentration (gr/dscf) equivalent to 0.070 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.

1.65 = The conversion factor of ton feed per ton clinker.

Q_k = The exhaust flow of the kiln (dscf/ton feed).
Q_c = The exhaust flow of the clinker cooler (dscf/ton feed).
Q_{cm} = The exhaust flow of the coal mill (dscf/ton feed).
7,000 = The conversion factor for grains (gr) per lb.

[40 CFR 63.1343(b)(2)]

OPERATING REQUIREMENTS

2.36 Continuous Control. The main kiln baghouse shall be operated continuously while the kiln is in operation.

[PSCAA Order of Approval No. 11681, Condition 13]

2.37 Baghouse Differential Pressure. The differential pressures across the baghouse shall be maintained according to the manufacturer's recommended design minimum and maximum differential pressure. The established manufacturer's design minimum and maximum differential pressures must be clearly marked nearby the monitoring interfaces of the baghouse.

[PSCAA Order of Approval No. 11681, Condition 14]

2.38 Operating Limits for Kilns.

a. To meet the D/F emissions limit in Specific Condition **2.24** (40 CFR 63.1343), the owner or operator must operate the kiln such that the temperature of the gas at the inlet to the kiln PM control device (PMCD) does not exceed the applicable temperature limit specified in paragraph b. The owner or operator must operate the in-line kiln/raw mill, such that:
   (1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph b. and established during the performance test when the raw mill was operating, is not exceeded, except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.
   (2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph b. and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.
b. The temperature limit for affected sources meeting the limits of paragraph a. is determined in accordance with 40 CFR 63.1349(b)(3)(iv) (See Specific Condition **2.77.d**. 40 CFR 63.1349(b)(3)(iv).)
c. Except as provided in paragraph **d**., for an affected source that employs carbon injection as an emission control technique, you must specify and use the brand and type of sorbent used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.
d. For an affected source that employs carbon injection as an emission control technique you may substitute, at any time, a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute sorbent will provide the same or better level of control as the original sorbent.

[40 CFR 63.1346(a), (b), (d) & (e)]

2.39 Startup and Shutdown. During periods of startup and shutdown operations, the kiln must meet the following work practices:

a. During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1,200 degrees Fahrenheit.
b. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse reaches 300 degrees Fahrenheit (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.
c. You must keep records as specified in 40 CFR 63.1355 (see Specific Condition **2.108**) during periods of startup and shutdown.
d. Only natural gas shall be used as fuel during the kiln start-up preheating period
e. Sulfur rings shall be removed from the kiln prior to start-up if sulfur ring formation had required the kiln to be shut down.
f. The kiln shall be operated in accordance with all PSCAA operation and maintenance requirements

[40 CFR 63.1343(b)(1)3. and 63.1346(g)]

[PSD-90-03 Amendment 3 approval condition 2.c.]

2.40 Operation and Maintenance Plan Requirements.

a. For each affected source subject to 40 CFR 63, Subpart LLL, you must prepare a written operations and maintenance plan. The plan must be submitted to the Agency for review and approval as part of each application for a part 70 permit and must include the following information:
   (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of 40 CFR 63.1343 and 63.1346. (see Specific Conditions **2.154**, **2.38** & **2.39**) Your operations and maintenance plan must address periods of startup and shutdown.
   (2) Corrective actions to be taken when required by 40 CFR 63.1350(f)(3) (see Specific Condition **2.150**);
   (3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.
b. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347

COMPLIANCE REQUIREMENTS

2.41 General Compliance Requirements. You must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in 40 CFR 63.1350 [Link to 40 CFR 63.1350] (see Specific Conditions **2.83** through **2.93**) and 40 CFR 63.8 [Link to 40 CFR 63.8] for each affected source.

a. You must monitor and collect data according to 40 CFR 63.1350 and the site-specific monitoring plan required by 40 CFR 63.1350(p) (see Specific Condition **2.93**).
b. Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals

at all times the affected source is operating.

c. You may not use data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

d. Clinker Production. You must determine the hourly production rate of clinker according to the requirements of 40 CFR 63.1350(d) (see Specific Condition **2.85**).

[40 CFR 63.1348(b)(1)]

2.42 Startup and Shutdown Compliance. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse reaches 300 degrees Fahrenheit (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.

[40 CFR 63.1348(b)(9)]

2.43 Changes in Operations.

a. If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under 40 CFR 63, Subpart LLL, the source must conduct a performance test as specified in 40 CFR 63.1349(b) (see Specific Conditions 2.56 – 2.59, 2.61 - 2.63, 2.65 – 2.68).

b. In preparation for and while conducting a performance test required in 40 CFR 63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in paragraphs b.(1) through b.(4) of this condition are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.

(1) You must provide the Agency written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under 40 CFR 63, Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph a. of this condition, including when the planned operational change period would begin.

(2) The performance test results must be documented in a test report according to 40 CFR 63.1349(a) (see Specific Condition **2.45**).

(3) A test plan must be made available to the Administrator prior to performance testing, if requested.

(4) The performance test must be completed within 360 hours after the planned operational change period begins.

[40 CFR 63.1348(c)]

2.44 General Duty to Minimize Emissions. At all times you must 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Agency 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.

[40 CFR 63.1348(d)]

2.45 Performance Testing Requirements. You must document performance test results in complete test reports that contain the information required by paragraphs **a.** through **j.** of this condition, as well as all other relevant information. As described in 40 CFR 63.7(c)((2)(i) [Link to 40 CFR 63.7(c)(2)(i)], you must make available to the Agency prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from the coal mill stack (when used), you must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in 40 CFR 63.1350(n)(1) through (10) (see paragraphs a. through j. of Specific Condition **2.91**) or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on the coal mill stack, you may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.

a. A brief description of the process and the air pollution control system;
b. Sampling location description(s);
c. A description of sampling and analytical procedures and any modifications to standard procedures;
d. Test results;
e. Quality assurance procedures and results;
f. Records of operating conditions during the performance test, preparation of standards, and calibration procedures;
g. Raw data sheets for field sampling and field and laboratory analyses;
h. Documentation of calculations;
i. All data recorded and used to establish parameters for monitoring; and
j. Any other information required by the performance test method.

[40 CFR63.1349(a)]

Opacity Monitoring

2.46 Ash Grove shall conduct monthly visual observations for detached plumes while the SNCR is in operation during daylight hours. No monitoring is required for any month during which the SNCR did not operate during daylight hours. The monitoring frequency may be reduced to quarterly after 2 years, if no detached plumes are observed. However, it shall revert back to monthly in the event a detached plume is observed. Monthly visual observations are not required if electing to comply with Condition 2.9 instead of Condition 2.8.

[PSCAA Order of Approval No. 11983, Condition 3]

2.47 Continuous Opacity Monitoring System (COMS). Ash Grove shall install, calibrate, maintain and operate, in accordance with 40 CFR 60.13 (See **Attachment 3. 40 CFR 60, Subpart A – General Provisions**), a continuous opacity monitoring system (COMS) on the main kiln stack and the clinker cooler stack (if not vented through the main kiln), subject to the following requirements:

a. *Data Recovery*. Ash Grove shall recover valid hourly monitoring data for at least 95% of the hours that the kiln operates during each calendar month except for periods of monitoring system downtime, provided that Ash Grove demonstrates to the Control Officer that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.
b. *Quality Assurance*. The COMS shall meet Performance Specification 1 in 40 CFR Part 60,

Appendix B, and Ash Grove shall operate this monitoring system in accordance with the U.S. Environmental Protection Agency's "Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems" (EPA 340/I-86-010).

c. *Data Recording*. Monitoring data commencing on the clock hour and containing at least 45 minutes of monitoring data shall be reduced to 1-hour averages. Monitoring data for opacity shall also be reduced to 6-minute averages. All monitoring data shall be included in these averages except for data collected during calibration drift tests and for data collected subsequent to a failed quality assurance test or audit.

d. *Data Retention*. The owner or operator shall retain all monitoring data averages for at least 5 years, including copies of all reports submitted to the Agency and records of all repairs, adjustments, and maintenance performed on the monitoring system.

e. *Data Reporting*. The owner or operator shall submit a monthly report to the Agency within 30 days after the end of the month in which the data were recorded. This report shall include:
   (1) The date, time period, magnitude (in the units of the standard) and cause of each emission that exceeded an applicable emission standard;
   (2) The date and time of all actions taken to correct the problem, including any actions taken to minimize the emissions during the exceedance and any actions taken to prevent its recurrence;
   (3) The number of hours that the equipment (required to be monitored) operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;
   (4) The date, time period, and cause of each failure to meet the data recovery requirements of paragraph a. of this condition, and any actions taken to ensure adequate collection of such data;
   (5) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90% of the hours that the equipment (required to be monitored) was operated each day;
   (6) A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

f. *Relative Accuracy Tests*. All relative accuracy tests shall be subject to the provisions of Regulation I, Section 3.07 (see Specific Conditions **5.28**, **5.29**, and **5.30**).

g. *Reporting and Recordkeeping*. Report as provided in Specific Conditions **2.47.e**. (above), **5.4**, **5.5**, and **5.6** (where applicable) each occasion on which the COMS records a violation of applicable opacity limit(s), or on which the COMS sustains an unexcused failure to meet the data recovery requirements of this condition. Maintain records as required in Specific Condition **6.2**.

[PSCAA Regulation 1, Sections 3.07 & 9.04, and Article12]
[PSCAA Order of Approval No. 11681, Condition 11]
[WAC 173-401-615(1)]
[40 CFR 60.13(a), (d) - (f) & (h);]

<u>NO_X Compliance and Continuous Emission Monitoring System</u>

2.48 Ash Grove shall install maintain and operate a NO_X continuous emissions monitoring system (CEMS) at the stack which collects emissions from the Kiln in accordance with the requirements of 40 C.F.R. Part 60. Ash Grove is not required to install or operate NO_X CEMS on the stack(s) of the indirect fired coal mills.

[General Regulatory Order 10825, Condition 7]
[PSCAA Order of Approval No. 11983, Condition 6]

2.49 Ash Grove shall determine and record the daily clinker production rates by either one of the two

following methods:

a. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of clinker produced in tons of mass per hour.; or
b. Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of feed to the kiln in tons of mass per hour. Ash Grove shall calculate hourly clinker production rate using a kiln specific feed-to-clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio should be updated no less frequently than once per month. If this ratio changes at clinker reconciliation, the new ratio must be used going forward, but it is not necessary to retroactively change clinker production rates previously estimated.

[General Regulatory Order 10825, Condition 8]
[PSCAA Order of Approval No. 11983, Condition 7]

2.50 Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS required in Specific Condition **2.46** shall be operated at all times during Kiln Operation. The CEMS shall be used to demonstrate compliance with the NO_X Emission Limits in Specific Condition **2.14**.

[General Regulatory Order 10825, Condition 9]
[PSCAA Order of Approval No. 11983, Condition 8]

2.51 The NOx CEMS required in Specific Condition **2.46** shall monitor and record the applicable NO_X emission rate from the Kiln stack in units of lbs. of NO_X per Ton of clinker produced and shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 C.F.R. Part 60.

[General Regulatory Order 10825, Condition 10]
[PSCAA Order of Approval No. 11983, Condition 9]

2.52 All emissions of NO_X from the kiln shall be measured by CEMS. For the purposes of demonstrating compliance with the NO_X limit from NOC OA 11983, during any time when CEMs are inoperable and otherwise not measuring emissions of NO_X from the Kiln, Ash Grove shall apply the missing data substitution procedures in 40 C.F.R. Part 75, Subpart D.

[General Regulatory Order 10825, Condition 11]
[PSCAA Order of Approval No. 11983, Condition 10]

SO_2 Compliance and Continuous Emission Monitoring Systems

2.53 The Permittee shall operate and maintain a SO_2 continuous emissions monitoring system (CEMS) at the stack which collects emissions from the Kiln in accordance with the requirements of 40 C.F.R. Part 60. Ash Grove is not required to install or operate SO_2 CEMS on the stack(s) of the indirect fired coal mills.

[General Regulatory Order 10825, Condition 13]

2.54 Except during CEMS breakdowns, repairs, calibration checks, and zero span adjustments, the CEMS required in Specific Condition **2.53** shall be operated at all times during Kiln Operation. The CEMS shall be used to demonstrate compliance with the SO_2 Emission Limits established through the requirements identified in Specific Condition **2.15**.

[General Regulatory Order 10825, Condition 14]

2.55 The SO_2 CEMS required in Specific Condition **2.53** shall monitor and record the applicable SO_2 emission rate from the Kiln stack in units of lbs. of SO_2 per Ton of clinker produced and shall be installed, certified, calibrated, maintained, and operated in accordance with the applicable requirements of 40 C.F.R. Part 60.

[General Regulatory Order 10825, Condition 15]

2.56 All emissions of SO_2 from the Kiln shall be measured by CEMS. For the purposes of demonstrating compliance with the NO_X limit from General Regulatory Order 10825, during any time when CEMs are inoperable and otherwise not measuring emissions of SO_2 from the Kiln, Ash Grove shall apply the missing data substitution procedures in 40 C.F.R. Part 75, Subpart D.

[General Regulatory Order 10825, Condition 16]

Baghouse Particulate Matter Compliance (Except Main Kiln Baghouse)

2.57 Ash Grove may demonstrate compliance with the PM_{10} limit in Specific Condition **2.12** by any of the following:

a. Performing a Puget Sound Clean Air Agency-approved source test according to EPA Method 5 or EPA Method 201A;
b. Demonstrating no visible emissions for 15 consecutive seconds;
c. Demonstrating no visible emissions for three consecutive minutes; or
d. Repairing within 24 hours, any baghouse that has visible emissions for more than three consecutive minutes.

Compliance shall be determined for visible emissions using EPA Method 22. The Puget Sound Clean Air Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107.

[PSCAA Order of Approval No. 11681, Condition 4]

Main Kiln Baghouse Particulate Matter (PM) Compliance Tests

2.58 Compliance with the PM limit of 0.07 lbs PM/Ton of clinker from the main stack shall be demonstrated using a three run EPA Method 5 or Method 5I performance test and that performance test shall be repeated no less frequently than every 365 Operating Days. If performance testing would be required less than 15 Operating Days after the Kiln has completed Startup after being down for more than 24 hours, then performance testing may be deferred up to 15 Operating Days after completion of the Startup. Ash Grove need not demonstrate compliance at the stack venting exhaust gases from the coal mills. However, the Permittee shall control indirect-fired coal mill feed gas from the kiln exhaust according to the standard protocol of the coal mill system. The Permittee shall not adjust, increase or activate the coal mill feed gas in order to affect the emissions at the main stack in any way. The methods specified in this condition for demonstrating compliance with the PM limits are not intended to change the means by which Ash Grove demonstrates compliance with any other standards.

[General Regulatory Order 10825, Condition 17]

2.59 For each performance test, Ash Grove shall conduct three separate runs under the conditions that exist when the Kiln is operating at the highest load or capacity level reasonably expected to occur. The Permittee shall conduct each test run to collect a minimum sample volume of 2 dry standard cubic meters (“dscm”) for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Ash Grove shall calculate the average of the results from three runs to determine compliance. Ash Grove need not determine the PM collected in the impingers (‘‘back half’’) of the EPA Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM Emission Limit of 0.07 lbs. PM/Ton of clinker. This shall not preclude the Agency from requiring a determination of the ‘‘back half’’ for other purposes nor shall it be deemed to exempt Ash Grove from any other applicable PM limit.

[General Regulatory Order 10825, Condition 18]

Main Kiln Baghouse Particulate Matter (PM) Continuous Parametric Monitoring System (CPMS)

2.60 The Permittee shall operate and maintain a PM continuous parametric monitoring system (CPMS) at the stack from which the Kiln directly discharges emissions, in accordance with the

requirements of Specific Conditions **2.61** - **2.67** and 40 C.F.R. 63.1350(b) and (d) [Link to 40 CFR 63 1350]. Ash Grove is not required to install or operate PM CPMS on the stack(s) of the indirect fired coal mills unless otherwise required to do so under any other applicable regulation.

[General Regulatory Order 10825, Condition 19]
[40 CFR 60.63(c)(1)
[40 C.F.R. 63.1348(b)(2), 63.1350(b) and (d)]

2.61 The Permittee shall use the PM CPMS to establish a Site-Specific Operating Limit (SSOL) for PM corresponding to the results of the performance test demonstrating compliance with the PM limit. The Permittee shall conduct a performance test using EPA Method 5 or Method 51 at Appendix A-3 of 40 C.F.R. Part 60. [Link to 40 CFR 60, Appendix A-3].

[General Regulatory Order 10825, Condition 20]

2.62 Except during CPMS breakdowns, repairs, calibration checks, and zero span adjustments, the CPMS required by Specific Conditions **2.60** and **2.61** of this Permit shall be operated at all times during Kiln Operation.

[General Regulatory Order 10825, Condition 21]

2.63 The Permittee shall reassess and adjust each SSOL, developed in accordance with Conditions **2.60**, **2.61**, **2.63** and **2.64** and in accordance with the results of each most recent PM performance test demonstrating compliance with the PM Emission Limit. The SSOL will correspond to the highest 1-hour average CPMS output value recorded during any performance test demonstrating compliance.

[General Regulatory Order 10825, Condition 22]

2.64 The CPMS required in Specific Condition **2.60** shall monitor and record the output data for all periods of Kiln Operation and the CPMS is not out-of-control. Compliance with the SSOL must be demonstrated by using all quality-assured hourly average data collected by the CPMS for all hours of Kiln Operation to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps, PM concentration, raw data signal) on a 30 Operating Day rolling average basis, updated at the end of each new Kiln Operating Day.

[General Regulatory Order 10825, Condition 23]

2.65 To determine continuous compliance with particulate matter limit in Specific Condition **2.16**, Ash Grove must record the PM CPMS output data for all periods of Kiln Operation when the PM CPMS is not out-of-control. Ash Grove must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (e.g., milliamps, PM concentration, raw 1 data signal) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use the following equation to determine the 30 kiln operating day average.

$$30\text{kiln operating day} = \frac{\sum_{i=1}^{n} Hpvi}{n}$$

where:
Hpvi = The hourly parameter value for hour i;
n = The number of valid hourly parameter values collected over 30 kiln operating days.

[Order of Approval No. 11681, Condition 7]
[General Regulatory Order 10825, Condition 24]

2.66 For any deviation from the SSOL established in accordance with Specific Condition **2.60** of this Permit, Ash Grove shall:

a. Within 48 hours of the deviation, visually inspect the PM Control Technology;
b. If inspection of the PM Control Technology identifies the cause of the deviation, take corrective action as soon as possible, and return the CPMS measurement to within the SSOL; and
c. Within 45 Days of the deviation or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the SSOL consistent with Specific Conditions **2.61**, **2.63** and **2.64** of this Permit. Ash Grove is not required to conduct additional testing for any deviations that occur between the time of the original deviation and the PM emissions compliance test required under this condition.

[General Regulatory Order 10825, Condition 25]

2.67 Ash Grove shall not have deviations of the 30-day rolling average from the established SSOL leading to more than four required performance tests in a 12-consecutive month period (rolling monthly).

[General Regulatory Order 10825, Condition 26]

2.68 PM Compliance. You must monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS). For your PM CPMS, you will establish a site-specific operating limit. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit equivalent to 75 percent of the standard. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit, you will use the average PM CPMS value recorded during the PM compliance test demonstrating compliance with the PM limit to establish your operating limit. You will use the PM CPMS to demonstrate continuous compliance with your operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

a. Your PM CPMS must provide a 4-20 milliamp or digital signal output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps or the monitors digital equivalent.
b. Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to three times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to three times your allowable emission limit.
c. During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp or digital output values from the PM CPMS for the periods corresponding to the compliance test runs (*e.g.,* average all your PM CPMS output values for three corresponding 2-hour Method 5I test runs).

[40 CFR 60.63(c)(2)]
[40 CFR 63.1349(b)(1)(i)]

2.69 Determine your operating limit as specified in Specific Conditions **2.70** and **2.71**. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit, you will use the average PM CPMS value recorded during the PM compliance test, the milliamp or digital equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit, you will use the average PM

CPMS value recorded during the PM compliance test to establish your operating limit. You must verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test at least annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.

[40 CFR 60.63(c)(3)]
[40 CFR 63.1349(b)(1)(ii)]

2.70 If the average of your three Method 5 or 5I compliance test runs is below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the procedures in paragraphs a. though d. of this condition.

a. Determine your PM CPMS instrument zero output with one of the following procedures.
   (1) Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.
   (2) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.
   (3) The zero point can/may also can be obtained by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (e.g., when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.
   (4) If none of the steps in paragraphs a.(1) through a.(3) are possible, you must use a zero output value provided by the manufacturer.

b. Determine your PM CPMS instrument average in milliamps or digital equivalent and the average of your corresponding three PM compliance test runs, using the following equation (40 CFR 63, Subpart LLL - Equation 3):

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} X_1 , \qquad \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Y_1$$

Where:
X_1 = The PM CPMS data points for the three runs constituting the performance test,
Y_1 = The PM concentration value for the three runs constituting the performance test, and
n = The number of data points.

c. With your PM CPMS instrument zero expressed in milliamps or a digital value, your three-run average PM CPMS milliamp or digital signal value, and your three-run average PM concentration from your three PM performance test runs (PM compliance test average), determine a relationship of lb/ton-clinker per milliamp or digital signal with the following equation (40 CFR 63, Subpart LLL – Equation 4).

$$R = \frac{Y_1}{(X_1 - z)}$$

Where:
R = The relative lb/ton clinker per milliamp or digital equivalent for your PM CPMS.
Y_1 = The three run average PM lb/ton clinker.
X_1 = The three run average milliamp or digital signal output from your PM CPMS.

z = The milliamp or digital equivalent of your instrument zero determined from paragraph a., above.

d. Determine your source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp or digital signal value from the equation in paragraph c., above, in the equation below (40 CFR 63, Subpart LLL – Equation 5), below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R}$$

Where:

O_l = The operating limit for your PM CPMS on a 30-day rolling average, in milliamps or the digital equivalent.

L = Your source emission limit expressed in lb/ton clinker.

z = Your instrument zero in milliamps or a digital equivalent, determined from paragraph **a**.

R = The relative lb/ton-clinker per milliamp or digital equivalent, for your PM CPMS, from Equation 2.

[40 CFR 60.63(c)(4)]
[40 CFR 63.1349(b)(1)(iii)]

2.71 If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit, you must determine your operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using the following equation (40 CFR 63, Subpart LLL - Equation 6).

$$O_h = \frac{1}{n}\sum_{i=1}^{n} X_1$$

Where:

X_1 = The PM CPMS data points for all runs i.

n = The number of data points.

O_h = Your site specific operating limit, in milliamps or digital equivalent.

[40 CFR 60.63(c)(5)]
40 CFR 63.1349(b)(1)(iv)]

2.72 To determine continuous compliance, you must record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for calculations when the source is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps or the digital equivalent) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use the following equation (40 CFR 63, Subpart LLL - Equation 7) to determine the 30 kiln operating day average.

$$30\ kiln\ operating\ day\ average = \frac{\sum_{i=1}^{n} Hpv_i}{n}$$

Where:

Hpvi = The hourly parameter value for hour i.

n = The number of valid hourly parameter values collected over the previous 30 kiln operating days.

[40 CFR 60.63(c)(6)]
40 CFR 63.1349(b)(1)(v)

2.73 Use EPA Method 5 or Method 5I of Appendix A to 40 CFR 60 to determine PM emissions. For each performance test, conduct at least three separate runs each while the mill is on and the mill is off under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Conduct each test run to collect a minimum sample volume of 2 dscm for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Calculate the time weighted average of the results from three consecutive runs, including applicable sources as required by Specific Condition **2.75**, to determine compliance. You need not determine the particulate matter collected in the impingers ("back half") of the Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM standards of 40 CFR 63, Subpart LLL. This shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes. For kilns with inline raw mills, testing must be conducted while the raw mill is on and while the raw mill is off. If the exhaust streams of a kiln with an inline raw mill and a clinker cooler are comingled, then the comingled exhaust stream must be tested with the raw mill on and the raw mill off.

[40 CFR 60.63(c)(7)]
[40 CFR 63.1349(b)(1)(vi)]

2.74 For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp or digital signal value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run.

[40 CFR 60.63(c)(8)]
[40 CFR 63.1349(b)(1)(vii)]

2.75 The main exhaust and inline coal mill must be tested simultaneously and the combined emission rate of PM from the kiln and inline coal mill must be computed for each run using the following equation (40 CFR 63, Subpart LLL - Equation 8).

$$Ec_m = \frac{(E_k + E_c)}{P}$$

Where:

E_{Cm} = Combined hourly emission rate of PM from the kiln and inline coal mill, lb/ton of kiln clinker production.

E_K = Hourly emissions of PM emissions from the kiln, lb.

E_C = Hourly PM emissions from the inline coal mill stack, lb.

P = Hourly clinker production, tons.

[40 CR 63.1349(b)(1)(viii)]

2.76 For the PM CPMS:

a. You must operate the monitoring system and collect data at all required intervals at all times the affected source is operating, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

b. You may not use data recorded during the monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. An owner or operator must use all the data collected during all other periods in reporting emissions or operating levels.

c. You must meet the requirements of 40 CFR 60.13(h) (see Specific Condition **2.94**.) when determining the 1-hour averages of emissions data.

[40 CFR 60.63(g)]

Main Kiln Baghouse Other Test Requirements

2.77 D/F Emissions Tests. You must conduct a performance test using Method 23 of appendix A-7 to 40 CFR 60 (Link to 40 CFR 60) at the frequency listed in Specific Condition **2.81**.

a. Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).

b. The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

c. Average temperatures must be calculated for each run of the performance test.

d. The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 CFR 63.1346(b) (see Specific Condition **2.38**).

[40 CFR 63.1349(b)(3)]

2.78 THC Emissions Test.

a. You must operate a CEMS in accordance with the requirements in 40 CFR 63.1350(i) (see Specific Conditions **2.87** & **2.88**). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 to 60 ppmvw and the reference method (RM) is Method 25A of appendix A to 40 CFR 60 (Link to 40 CFR 60).

b. When kiln gases are diverted to a coal mill and exhausted through a separate stack, you must calculate a kiln-specific THC limit using the following equation (40 CFR 63, Subpart LLL – Equation 9):

$$Cks = \frac{MACT\ Limit\ x\ (Qcm+Qks))-(Qcm\ x\ Ccm)}{Qks}$$

Where:

Cks = Kiln stack concentration (ppmvd).

Qcm = Coal mill flow rate (volume/hr).

Ccm = Coal mill concentration (ppmvd).
Qks = Kiln stack flow rate (volume/hr).

c. THC must be measured either upstream of the coal mill or the coal mill stack.
d. Instead of conducting the performance test specified in this Specific Condition, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in 40 CFR 63.1349(b)(7) (see Specific Condition **2.80**).

[40 CFR63.1349(b)(4)]

2.79 Mercury Emissions Tests. You must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of 40 CFR 63.1350(k) (see Specific Condition **2.89**).

a. If you are using a mercury CEMS or a sorbent trap monitoring system, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in 40 CFR 63.1350(k)(5) (see paragraph **e**. of Specific Condition **2.89**).
b. Calculate the emission rate using the following equation (40 CFR 63, Subpart LLL – Equation 10):

$$E_{30D} = \mathrm{k}\frac{\sum_{i=1}^{n} C_i Q_i}{P}$$

Where:

E_{30D} = 30-day rolling emission rate of mercury, lb/MM tons clinker.
C_i = Concentration of mercury for operating hour i, µg/scm.
Q_i = Volumetric flow rate of effluent gas for operating hour i, where C_i and Q_i are on the same basis (either wet or dry), scm/hr.
k = Conversion factor, 1 lb/454,000,000 µg.
n = Number of kiln operating hours in the previous 30 kiln operating day period where both C and Qi qualified data are available.
P = Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

[40 CFR 63.1349(b)(5)]

2.80 Total Organic HAP Emissions Tests. Instead of conducting the performance test specified in Specific Condition **2.78**, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs a. through e., below.

a. Use Method 320 of Appendix A to 40 CFR 63, Method 18 of Appendix A of 40 CFR 60, ASTM D6348-03 or a combination to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with 40 CFR 63.7(e). Each run must be conducted for at least 1 hour.
b. At the same time that you are conducting the performance test for total organic HAP, you must also determine a site-specific THC emissions limit by operating a THC CEMS in accordance with the requirements of 40 CFR 63.1350(j) (see Specific Condition **2.88**). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the recorded output) during the 3-hour test must be calculated. You must establish your THC operating limit and determine compliance with it according to paragraphs g. and h. of this condition. It is permissible to extend the testing time of the organic HAP performance test if you believe extended testing is required to adequately capture organic HAP and/or THC variability over time.

c. Because your source has an in-line kiln/raw mill you must use the fraction of time the raw mill is on and the fraction of time that the raw mill is off and calculate this limit as a weighted average of the THC levels measured during three raw mill on and three raw mill off tests.
d. If your organic HAP emissions are below 75 percent of the organic HAP standard and you determine your operating limit with paragraph g. of this condition, your THC CEMS must be calibrated and operated on a measurement scale no greater than 180 ppmvw, as carbon, or 60 ppmvw as propane.
e. Because your kiln has an inline coal mill with a separate stack, you are required to measure and account for oHAP emissions from their separate stacks (when the coal mill is used). You are required to measure oHAP at the coal mill inlet or outlet. You must then calculate a flow weighted average oHAP concentration for all emission sources including the inline coal mill.
f. Your THC CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times your highest THC emissions average determined during your performance test, including mill on or mill off operation. **Note:** This may require the use of a dual range instrument to meet this requirement and paragraph d. of this condition.
g. Determine your operating limit as specified in paragraphs h. and i. of this condition. If your organic HAP performance test demonstrates your average organic HAP emission levels are below 75 percent of your emission limit (9 ppmv) you will use the average THC value recorded during the organic HAP performance test, and the average total organic HAP result of your performance test to establish your operating limit. If your organic HAP compliance test results demonstrate that your average organic HAP emission levels are at or above 75 percent of your emission limit, your operating limit is established as the average THC value recorded during the organic HAP performance test. You must establish a new operating limit after each performance test. You must repeat the performance test no later than 30 months following your last performance test and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.
h. If the average organic HAP results for your three Method 18 and/or Method 320 performance test runs are below 75 percent of your organic HAP emission limit, you must calculate an operating limit by establishing a relationship of THC CEMS signal to the organic HAP concentration using the average THC CEMS value corresponding to the three organic HAP compliance test runs and the average organic HAP total concentration from the Method 18 and/or Method 320 performance test runs with the procedures in paragraphs h.(1) and h.(2) of this condition.
   (1) Determine the THC CEMS average value in ppmvw, and the average of your corresponding three total organic HAP compliance test runs, using the following equation (40 CFR 63, Subpart LLL – Equation 12):

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} Xi\ ,\quad \bar{y} = \frac{1}{n}\sum_{i=1}^{n} Yi$$

   Where:
   $\bar{x}$ = The average THC CEMS value in ppmvw, as propane.
   X_i = The THC CEMS data points in ppmvw, as propane, for all three test runs.
   $\bar{y}$ = The average organic HAP value in ppmvd, corrected to 7 percent oxygen.
   Y_i = The organic HAP concentrations in ppmvd, corrected to 7 percent oxygen, for all three test runs.

n = The number of data points.

(2) You must use your 3-run average THC CEMS value and your 3-run average organic HAP concentration from your Method 18 and/or Method 320 compliance tests to determine the operating limit. Use the following equation (40 CFR 63, Subpart LLL – Equation 13) to determine your operating limit in units of ppmvw THC, as propane.

$$T_l = \left(\frac{9}{\bar{y}}\right) * \bar{x}$$

Where:

T_l = The 30-day operating limit for your THC CEMS, ppmvw, as propane.

$\bar{y}$ = The average organic HAP concentration from Eq. 12, ppmvd, corrected to 7 percent oxygen.

$\bar{x}$ = The average THC CEMS concentration from Eq. 12, ppmvw, as propane.

9 = 75 percent of the organic HAP emissions limit (12 ppmvd, corrected to 7 percent oxygen)

i. If the average of your three organic HAP performance test runs is at or above 75 percent of your organic HAP emission limit, you must determine your operating limit using the following equation (40 CFR 63, Subpart LLL – Equation 14) by averaging the THC CEMS output values corresponding to your three organic HAP performance test runs that demonstrate compliance with the emission limit. If your new THC CEMS value is below your current operating limit, you may opt to retain your current operating limit, but you must still submit all performance test and THC CEMS data according to the reporting requirements in this permit.

$$T_h = \frac{1}{n}\sum_{i=1}^{\infty} X_1$$

Where:

X_1 = The THC CEMS data points for all runs i.

n = The number of data points.

T_h = Your site specific operating limit, in ppmvw THC.

j. Because your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating ("mill on") and while the raw mill is not operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with the following equation (40 CFR 63, Subpart LLL – Equation 15):

$$R = (y * t) + (x * (1 - t))$$

Where:

R = Operating limit as THC, ppmvw.

y = Average THC CEMS value during mill on operations, ppmvw.

t = Percentage of operating time with mill on.

x = Average THC CEMS value during mill off operations, ppmvw.

$(1-t)$ = Percentage of operating time with mill off.

k. To determine continuous compliance with the THC operating limit, you must record the THC CEMS output data for all periods when the process is operating and the THC

CEMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the THC CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use the following equation (40 CFR 63, Subpart LLL – Equation 16) to determine the 30 kiln operating day average.

$$30\ kiln\ operating\ day = \frac{\sum_{i=1}^{n} Hpv_i}{n}$$

Where:

Hpvi = The hourly parameter value for hour i, ppmvw.

n = The number of valid hourly parameter values collected over 30 kiln operating days.

l. Use EPA Method 18 or Method 320 of Appendix A to 40 CFR 60 (Link to 40 CFR 60) to determine organic HAP emissions. For each performance test, conduct at least three separate runs under the conditions that exist when the affected source is operating at the level reasonably expected to occur. If your source has an in-line kiln/raw mill you must conduct three separate test runs with the raw mill on, and three separate runs under the conditions that exist when the affected source is operating at the level reasonably expected to occur with the mill off. Conduct each Method 18 test run to collect a minimum target sample equivalent to three times the method detection limit. Calculate the average of the results from three runs to determine compliance.

m. If the THC level exceeds by 10 percent or more your site-specific THC emissions limit, you must

(1) As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the THC CEMS measurements to within the established value; and

(2) Within 90 days of the exceedance or at the time of the 30 month compliance test, whichever comes first, conduct another performance test to determine compliance with the organic HAP limit and to verify or re-establish your site-specific THC emissions limit.

[40 CFR 63.1349(b)(7)]

2.81 Performance Test Frequency. Except as provided in 40 CFR 63.1348(b) (Link to 40 CFR 63.1348(b)) (see Specific Conditions **2.41**, **2.60**, and **2.86** – **2.89**), performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit. Performance tests required every 30 months must be completed no more than 31 calendar months after the previous performance test except where that specific pollutant is monitored using CEMS; performance tests required every 12 months must be completed no more than 13 calendar months after the previous performance test.

[40 CFR 63.1349(c)]

2.82 Conditions of Performance Tests. Conduct performance tests under such conditions as the Agency specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Agency such records as may be necessary to determine the conditions of performance tests.

[40 CFR 63.1349(e)]

Monitoring Requirements

2.83 General Monitoring Requirements.

a. The owner or operator must demonstrate compliance with 40 CFR 63, Subpart LLL on a continuous basis by meeting the requirements of this Permit.
b. For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests.
c. Any instance where the owner or operator fails to comply with the continuous monitoring requirements of this section is a violation.

[40 CFR 63.1350(a)]

2.84 PM Monitoring Requirements.

a. PM CPMS. You will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using Method 5 or Method 5I at appendix A-3 to 40 CFR 60 (Link to 40 CFR 60). You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in 40 CFR 63.1349(b)(1)(i) through (vi) (Link to 40 CFR 63.1349(b)(1)) (see Specific Conditions **2.68** – **2.73**). You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration.
b. To determine continuous compliance, you must use the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day.
c. For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, you must:
   (1) Within 48 hours of the exceedance, visually inspect the air pollution control device (APCD);
   (2) If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and
   (3) Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph.
d. PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of this subpart.

[40 CFR 63.1350(b)]

2.85 Clinker Production Monitoring Requirements. In order to determine clinker production, you must:

a. Determine hourly clinker production by one of two methods:
   (1) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of clinker produced in tons of mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy, or

(2) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of feed to the kiln in tons of mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed-to-clinker ratio based on reconciled clinker production rates determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.

(3) For each kiln operating hour for which you do not have data on clinker production or the amount of feed to the kiln, use the value from the most recent previous hour for which valid data are available.

b. Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production rates or feed rates before initial use (for new sources) or by the effective compliance date of this rule (for existing sources). During each (calendar) quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production rates or feed rates.

c. If you measure clinker production directly, record the daily clinker production rates; if you measure the kiln feed rates and calculate clinker production, record the daily kiln feed and clinker production rates.

d. Develop an emissions monitoring plan in accordance with paragraphs a. through d. of Specific Condition **2.93**.

[40 CFR 60.63(b)]
[40 CFR 63.1350(d)]

2.86 D/F Compliance and Monitoring Requirements. You must comply with the monitoring requirements of paragraphs a. through e. of this condition and paragraphs a. through e. of Specific Condition **2.90** to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs a. through d. of Specific Condition **2.93**.

a. You must install, calibrate, maintain, and continuously operate a CMS to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PMCD.

(1) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in 40 CFR 63.1249(b)(3)(iv) (see Specific Condition **2.77.d.**).

(2) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.

(3) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.

b. You must monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the kiln PMCD.

c. The required minimum data collection frequency must be one minute.

d. Every hour, record the calculated rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. (See Specific Condition **2.77**.)

e. When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

[40 CFR 63.1348(b)(4) & 63.1350(g)]

2.87 THC Compliance and Monitoring Requirements. You must comply with the monitoring

requirements of paragraphs a. through c. of this condition and paragraphs a. through d. of Specific Condition **2.90**. You must also develop an emissions monitoring plan in accordance with paragraphs a. through d. of Specific Condition **2.93**.

a. You must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 or Performance Specification 8A of Appendix B to 40 CFR 60 (Link to 40 CFR 60) and comply with all of the requirements for continuous monitoring systems found in the general provisions, 40 CFR 63, Subpart A (Link to 40 CFR 63, Subpart A). The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F in 40 CFR 60 (Link to 40 CFR 60). For THC continuous emission monitoring systems certified under Performance Specification 8A, conduct the relative accuracy test audits required under Procedure 1 in accordance with Performance Specification 8, Sections 8 and 11 using Method 25A in Appendix A to 40 CFR 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, Section 13.2 (Link to Section 13.2).
b. Performance tests on coal mill stacks must be conducted using Method 25A in Appendix A to 40 CFR part 60 and repeated every 30 months.
c. When the coal mill is used, THC must be measured either upstream of the coal mill or in the coal mill stack.

[40 CFR 63.1348(b)(6) & 63.1350(i)]

2.88 Total Organic HAP Compliance and Monitoring Requirements. If you are complying with the total organic HAP emissions limits, you must continuously monitor THC according to paragraphs a. and b. of Specific Condition 2.76 or in accordance with Performance Specification 8 or Performance Specification 8A of Appendix B to 40 CFR 60 [Link to 40 CFR 60] and comply with all of the requirements for continuous monitoring systems found in the general provisions of 40 CFR 63, Subpart A [Link to 40 CFR 63, Subpart A]. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F in 40 CFR 60 [Link to 40 CFR 60]. You must also develop an emissions monitoring plan in accordance with paragraphs a. through d. of Specific Condition **2.93**.

[40 CFR 63.1348(b)(6) & 1350(j)]

2.89 Mercury Compliance and Monitoring Requirements. You must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of Appendix B to 40 CFR 60 [Link to 40 CFR 60] or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of Appendix B to 40 CFR 60. You must monitor mercury continuously according to paragraphs a. through d. of this condition. You must also develop an emissions monitoring plan in accordance with paragraphs a. through d. of Specific Condition **2.93**.

If you use an integrated sorbent trap monitoring system to determine ongoing compliance, use the procedures described in 40 CFR 63.1348(a)(5) [Link to 40 CFR 63.1348(a)(5)] to assign hourly mercury concentration values and to calculate rolling 30 operating day emissions rates. Since you assign the mercury concentration measured with the sorbent trap to each relevant hour respectively for each operating day of the integrated period, you may schedule the sorbent trap change periods to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals).

When the coal mill is used, Mercury must be measured either upstream of the coal mill or in the coal mill stack.

a. You must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to

the nearest multiple of 5 µg/m^3 of total mercury or higher level if necessary to include Hg concentrations which may occur (excluding concentrations during in-line raw "mill off" operation). As specified in PS 12A, [Link to Appendix B to Part 60, Title 40], the data recorder output range must include the full range of expected Hg concentration values which would include those expected during "mill off" conditions. Engineering judgments made and calculations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records.

b. In order to quality assure data measured above the span value, you must use one of the four options in paragraphs b.(1) through b.(4) of this condition.

(1) Include a second span that encompasses the Hg emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 µg/m^3 of total mercury. The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required.

(2) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph a. of this condition using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of PS 12A, [Link to Appendix B to Part 60, Title 40] and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the Hg CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the Hg CEMS during the above span linearity challenge exceeds ±10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the Hg CEMS to service, or data above span from the Hg CEMS must be subject to the quality assurance procedures established in paragraph b.(3) of this condition. In this manner all hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ±20 percent of the certified value of the reference gas must be normalized using the following equation (40 CFR 63, Subpart LLL – Equation 22):

$$\frac{Certified\ reference\ gas\ value}{Measured\ value\ of\ reference\ gas}\ x\ Measured\ stack\ gas\ result = Normalized\ stack\ gas\ result$$

(3) Quality assure any data above the span value established in paragraph a. of this condition using the following procedure. Any time two consecutive 1-hour average measured concentrations of Hg exceeds the span value you must, within 24 hours before or after, introduce a higher, "above span" Hg reference gas standard to the Hg CEMS. The "above span" reference gas must meet the requirements of PS 12A, [Link to Appendix B to Part 60, Title 40], must target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include "above span" calibrations done before or after the above span measurement period. Record and report the results of this procedure as you would for a daily calibration. The "above span" calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20

percent of the certified value of the reference gas, then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the "above span" calibration for reporting based on the Hg CEMS response to the reference gas as shown in the equation in paragraph b.(2) (40 CFR 63, Subpart LLL – Equation 22). Only one "above span" calibration is needed per 24-hour period.

c. You must operate and maintain each Hg CEMS or an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of Appendix F to 40 CFR 60 [Link to Appendix F to Part 60 Title 40]. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, you may apply the appropriate exception for sorbent trap section 2 breakthrough in paragraphs c.(1) through c.(4) of this condition:
   (1) For stack Hg concentrations >1 µg/dscm, ≤10% of section 1 mass;
   (2) For stack Hg concentrations ≤1 µg/dscm and >0.5 µg/dscm, ≤20% of section 1 mass;
   (3) For stack Hg concentrations ≤0.5 µg/dscm and >0.1 µg/dscm, ≤50% of section 1 mass; and
   (4) For stack Hg concentrations ≤0.1 µg/dscm, no breakthrough criterion assuming all other QA/QC specifications are met.

d. Relative accuracy testing of mercury monitoring systems under PS 12A, PS 12B, or Procedure 5 must be conducted at normal operating conditions. If a facility has an inline raw mill, the testing must occur with the raw mill on.

e. You must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs a. through j. of Specific Condition **2.91**. If kiln gases are diverted to a coal mill and exhausted through a separate stack, you must account for the mercury emitted from those stacks by following the procedures in paragraphs e.(1) through e.(4) of this condition:
   (1) Develop a mercury hourly mass emissions rate by conducting performance tests annually, within 11 to 13 calendar months after the previous performance test, using Method 29, or Method 30B, to measure the concentration of mercury in the gases exhausted from the alkali bypass and coal mill.
   (2) On a continuous basis, determine the mass emissions of mercury in lb/hr from the coal mill exhaust by using the mercury hourly emissions rate and the exhaust gas flow rate to calculate hourly mercury emissions in lb/hr.
   (3) Sum the hourly mercury emissions from the kiln and coal mill to determine total mercury emissions. Using hourly clinker production, calculate the hourly emissions rate in pounds per ton of clinker to determine your 30 day rolling average.
   (4) If mercury emissions from the coal mill are below the method detection limit for two consecutive annual performance tests, you may reduce the frequency of the performance tests of the coal mill to once every 30 months. If the measured mercury concentration exceeds the method detection limit, you must revert to testing annually until two consecutive annual tests are below the method detection limit.

f. If you operate an integrated sorbent trap monitoring system conforming to PS 12B, you may use a monitoring period at least 24 hours but no longer than 168 hours in length. You should use a monitoring period that is a multiple of 24 hours (except during relative accuracy testing as allowed in PS 12B).

[40 CFR 63.1348(b)(7) and 63.1350(k)]

2.90 Parameter Monitoring Requirements. You must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs a. through d. of this condition. You must also meet the applicable specific parameter monitoring requirements in paragraphs e. through g. of this condition that are applicable to you.

a. The CMS 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.
b. You must conduct all monitoring in continuous operation at all times that the unit is operating.
c. Determine the 1-hour block average of all recorded readings.
d. Record the results of each inspection, calibration, and validation check.
e. *Liquid flow rate monitoring requirements.* If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs e.(1) through e.(4).
   (1) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.
   (2) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.
   (3) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.
   (4) Conduct a flow sensor calibration check at least semiannually.
f. *Specific pressure monitoring requirements.* If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs f.(1) through f.(6).
   (1) Locate the pressure sensor(s) in 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 tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance 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.
g. *Specific pH monitoring requirements.* If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs g.(1) through g.(3).
   (1) Locate the pH sensor in a position that provides a representative measurement of wet scrubber or tray tower effluent pH.
   (2) Ensure the sample is properly mixed and representative of the fluid to be measured.
   (3) Check the pH meter's calibration on at least two points every 8 hours of process operation.
h. *Bag leak detection monitoring requirements (BLDS).* If you elect to use a fabric filter bag leak detection system to comply with the requirements of 40 CFR 63, Subpart LLL, you must install, calibrate, maintain, and continuously operate a BLDS as specified in paragraphs h.(1) through h.(8).
   (1) You must install and operate a BLDS for each exhaust stack of the fabric filter.
   (2) Each BLDS must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.
   (3) The BLDS must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 or fewer milligrams per actual cubic meter.
   (4) The BLDS sensor must provide output of relative or absolute PM loadings.
   (5) The BLDS must be equipped with a device to continuously record the output signal from the sensor.
   (6) The BLDS must be equipped with an alarm system that will alert an operator automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.

(7) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a BLDS must be installed in each baghouse compartment or cell.
(8) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

i. For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:
(1) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;
(2) Sealing off defective bags or filter media;
(3) Replacing defective bags or filter media or otherwise repairing the control device;
(4) Sealing off a defective fabric filter compartment;
(5) Cleaning the BLDS probe or otherwise repairing the BLDS; or
(6) Shutting down the process producing the PM emissions.

[40 CFR 63.1350(m)]

2.91 Continuous Flow Rate Monitoring System**.** You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs a. through j. of this condition, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere.

a. You must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.
b. The flow rate monitoring system must be designed to measure the exhaust flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust flow rate.
c. [Reserved]
d. The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph b of this condition.
e. The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.
f. The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.
g. The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (*see* sections 3.1 and 8.3 of Performance Specification 2 in Appendix B to 40 CFR 60 [Link to 40 CFR 60] for a discussion of CD).
(1) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).
(2) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.
h. You must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to part 60 of the chapter with the exceptions in paragraphs (1) and (2) of this condition.
(1) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.

(2) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.

i. You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (n)(8).

j. You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

[40 CFR 63.1350(n)]

2.92 Alternate Monitoring Requirements Approval. You may submit an application to the Agency for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this permit subject to the provisions of paragraphs a. through f. of this condition.

a. The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.

b. If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.

c. You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs c.(1) through c.(3) of this condition:

(1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

d. The Agency will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Agency will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Agency will provide:

(1) Notice of the information and findings upon which the intended disapproval is based; and

(2) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

e. You are responsible for submitting any supporting information in a timely manner to enable the Agency to consider the application prior to the performance test. Neither submittal of an application, nor the Agency's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of 40 CFR 63, Subpart LLL.

f. The Agency may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of 40 CFR 63, Subpart LLL.

[40 CFR 63.1350(o)]

2.93 Development and Submittal of Monitoring Plans. You must develop a site-specific monitoring plan according to the requirements in paragraphs a. through d. of this condition. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under Specific Condition **2.92** and 40 CFR 63.8(f) [Link to 40 CFR 63.8(f)]. If you use a Bag Leak Detection System (BLDS), you must also meet the requirements specified in paragraph e. of this condition.

a. For each CMS required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs a.(1) through a.(3) of this condition. You must submit this site-specific monitoring plan, if requested, at least 30 days before your initial performance evaluation of your CMS.
   (1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
   (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
   (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).

b. In your site-specific monitoring plan, you must also address paragraphs b.(1) through b.(3) of this condition.
   (1) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3) and (c)(4)(ii) [Links to 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii)];
   (2) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d) [Link to 40 CFR 63.8(d)]; and
   (3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1) and (e)(2)(i) [Links to 40 CFR 63.10(c), (e)(1), and (e)(2)(i)].

c. You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.

d. You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

e. *BLDS Monitoring Plan.* Each monitoring plan must describe the items in paragraphs e.(1) through e.(5) of this condition. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs a. through d., h. and i. of Specific Condition **2.90** [40 CFR 63.1350(m)(1) through (m)(4), (m)(10) and (m)(11)] for a period of 5 years, with at least the first 2 years on-site;
   (1) Installation of the BLDS;
   (2) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;
   (3) Operation of the BLDS, including quality assurance procedures;
   (4) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;
   (5) How the BLDS output will be recorded and stored.

[40 CFR 63.1350(p)]

2.94 Continuous Monitoring Requirements.

a. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2 (Link to 40 CFR 60.2). Six-minute opacity averages shall be calculated from 36 or more data

points equally spaced over each 6-minute period.

b. For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:
   (1) Except as provided under paragraph (3) of this condition, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.
   (2) Except as provided under paragraph (3) of this condition, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.
   (3) For any operating hour in which required maintenance or quality-assurance activities are performed:
      (a) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or
      (b) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.
   (4) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph 3 of this condition are met, based solely on valid data recorded after the successful calibration.
   (5) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.
   (6) Except as provided under paragraph (7) of this condition, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.
   (7) Owners and operators complying with the requirements of 40 CFR 60.7(f)(1) or (2) (Link to 40 CFR 60.7(f)) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.
   (8) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g., hours with < 30 minutes of unit operation under 40 CFR 60.47b(d) (Link to 40 CFR 60.47b(d)).
   (9) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

c. All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

[40 CFR 60.13(h)]

2.95 Development and Submittal (Upon Request) of Monitoring Plans. To demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring (including PM CPMS), you must develop a site-specific monitoring plan according to the requirements in paragraphs a. through d. of this condition. This

requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under 40 CFR 60.13(3)(i). If you use a bag leak detector system (BLDS), you must also meet the requirements specified in 40 CFR 63.1350(m) (see Specific Condition **2.90**).

a. For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (1) through (3), below. You must submit this site-specific monitoring plan, if requested, at least 30 days before the initial performance evaluation of your CMS.
   (1) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);
   (2) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
   (3) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
b. In your site-specific monitoring plan, you must also address paragraphs (1) through (3), below.
   (1) Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);
   (2) Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
   (3) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i).
c. You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.
d. You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.

[40 CFR 60.13(i)]

2.96 Standards of Performance for Continuous Emission Monitoring Systems (CEMS).

a. Continuous Monitoring. It shall be unlawful for any person to cause or allow the operation of any equipment required to have a continuous emission monitoring system unless the emissions are continuously monitored in accordance with the requirements of this section.
b. Data Recovery. The owner or operator shall recover valid hourly monitoring data for at least 95% of the hours that the equipment (required to be monitored) is operated during each calendar month except for periods of monitoring system downtime, provided that the owner or operator demonstrates that the downtime was not a result of inadequate design, operation, or maintenance, or any other reasonably preventable condition, and any necessary repairs to the monitoring system are conducted in a timely manner.
c. Quality Assurance. The owner or operator shall install a continuous emission monitoring system that meets the performance specification in 40 CFR Part 60, Appendix B in effect at the time of its installation, and shall operate this monitoring system in accordance with the quality assurance procedures in Appendix F of 40 CFR Part 60 in effect as of the federal regulation reference date listed in PSCAA Regulation I: Section 3.25, herein incorporated by reference.
d. Data Recording. Monitoring data commencing on the clock hour and containing at least 45 minutes of monitoring data shall be reduced to 1-hour averages. Monitoring data for opacity shall also be reduced to 6-minute averages. All monitoring data shall be included in these averages except for data collected during calibration drift tests and cylinder gas audits, and for

data collected subsequent to a failed quality assurance test or audit.

e. Data Retention. The owner or operator shall retain all monitoring data averages for at least 5 years, including copies of all reports submitted to the Agency and records of all repairs, adjustments, and maintenance performed on the monitoring system.

f. Data Reporting. The owner or operator shall submit a monthly report to the Agency within 30 days after the end of the month in which the data were recorded. This report shall include:
   (1) The date, time period, magnitude (in the units of the standard) and cause of each emission that exceeded an applicable emission standard;
   (2) The date and time of all actions taken to correct the problem, including any actions taken to minimize the emissions during the exceedance and any actions taken to prevent its recurrence;
   (3) The number of hours that the equipment (required to be monitored) operated each month and the number of valid hours of monitoring data that the monitoring system recovered each month;
   (4) The date, time period, and cause of each failure to meet the data recovery requirements of Section 12.03(b) (see paragraph b. of this condition) and any actions taken to ensure adequate collection of such data;
   (5) The date, time period, and cause of each failure to recover valid hourly monitoring data for at least 90% of the hours that the equipment (required to be monitored) was operated each day;
   (6) The results of all cylinder gas audits conducted during the month; and
   (7) A certification of truth, accuracy, and completeness signed by an authorized representative of the owner or operator.

g. Relative Accuracy Tests. All relative accuracy tests shall be subject to the provisions of Regulation I, Section 3.07 (see Specific Condition **5.29**).

[PSCAA Regulation I, Article 12.03]

2.97 Federal Test Methods and Procedures.

a. In conducting the performance tests and relative accuracy tests required in 40 CFR 60.8, you must use reference methods and procedures and the test methods in 40 CFR 60, Appendix A or other methods and procedures as specified in this section, except as provided in 40 CFR 60.8(b) (see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**).

b. Compliance Methods.
   (1) You must demonstrate compliance with the PM standards in 40 CFR 60.62 (see Specific Condition **2.16**) using EPA method 5 or method 5I.
   (2) Use Method 9 and the procedures in 40 CFR 60.11 to determine opacity.

c. Submission of Test Reports.
   (1) Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by this Specific Condition, you must submit the results of the performance tests conducted to demonstrate compliance to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention:

WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

(2) Within 60 days after the date of completing each CEMS performance evaluation test as defined in 40 CFR 63.2, you must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (1). Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 63.13.

(3) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(4) All reports required by this permit not subject to the requirements in paragraphs (1) and (2), above, must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs (1) and (2), above, in paper format.

[40 CFR 60.64]

2.98 Federal Recordkeeping and Reporting Requirements for the PM CPMS.

a. Ash Grove shall submit reports of excess emissions. The content of these reports must comply with the requirements in 40 CFR 60.7(c). Notwithstanding the provisions of 40 CFR 60.7(c), such reports shall be submitted semiannually.

b. Ash Grove shall submit semiannual reports of the malfunction information required to be recorded by 40 CFR 60.7(b). These reports shall include the frequency, duration, and cause of any incident resulting in de-energization of any device controlling kiln emissions or in the venting of emissions directly to the atmosphere.

c. The requirements of this Specific Condition remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, 42 U.S.C. 7411, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

[40 CFR 60.65]

2.99 Fuel Monitoring Plan. Ash Grove shall submit a Fuel Monitoring Plan for injection of whole tires within 60 days after this approval. The plan shall contain the method for complying with condition **2.102**, the replacement fuel composition (i.e., Btu content, percent ash, etc.), and the maximum rate of whole tires that will be used. The rate established in this submitted plan will become the new allowable maximum TDF firing percentage and will be the tire injection rate required during the

testing for conditions a, b and c of this condition. This test will be a one-time occurrence within 60 days after the submittal of the updated fuel monitoring plan.

a. Ash Grove shall complete a study to determine if this operational change results in an increase in the emission rate of metallic TAPs listed in WAC 173-460-150. The metals to be tested include arsenic, beryllium, cadmium, chromium, lead, manganese, nickel, and selenium. Ash Grove shall submit a test plan that includes fuel rates for each condition. Tests will be in accordance with EPA Method 29, and the methodology for determining if there is an increase in emissions of a pollutant will be in accordance with Appendix C to 40 CFR Part 60. Based on the results of this test, one of the following two conditions shall take effect:

   i. If the study shows that modification does not lead to an increase in emissions of any tested TAP, the maximum rate of whole tires that will be used as defined in the Fuel Monitoring Plan shall replace the previously established permitted tire consumption rate of 30% by weight.

   ii. If the study shows that this modification results in an increase in the emission rate to the atmosphere of any TAP, then the previous established rate 30% TDF by weight, daily average limit shall remain in place.

   A limit of 30% TDF by weight, daily average limit shall remain in effect until the results of this study are reported, except for the days needed to conduct this study. During the days of this study, the TDF limit shall be defined in the fuel monitoring plan required by condition 4.

b. Ash Grove shall conduct a source test to demonstrate compliance with the following pre-established emission limits:

   i. Kiln exhaust shall not exceed 0.30 lb of particulate per ton of feed (dry basis) except during SSM periods using EPA method 5 or EPA method 201A.

   ii. Kiln exhaust shall not exceed 0.07 lb of particulate per ton of clinker except during SSM periods, per 40 CFR 63.1343(b)(1) using EPA method 5 or EPA method 201A.

   iii. Ash Grove shall not cause to be discharged into the atmosphere from the kiln exhaust Dioxin/Furan (D/F) exceeding 0.20 ng/dscm (TEQ) @ 7% O_2. If the average temperature at the inlet to the baghouse during the D/F performance test is 400°F or less, this limit is changed to 0.40 ng/dscm (TEQ).

c. Ash Grove shall conduct stack testing for hydrogen chloride (HCl) per EPA method 26 or 26A in accordance with PSCAA Regulation I 3.07. Ash Grove shall conduct the tests at the maximum rate of whole tire injection specified in the fuel monitoring plan and shall use the tests to calculate a facility-specific emissions factor for HCl, in units of pounds of HCl per ton of clinker. The tests shall include three runs under raw-mill-up conditions, and three runs under raw-mill-down conditions.

[NOC 12003 conditions 4, 5 and 7]

Notification, Reporting and Recordkeeping

2.100 Records of all baghouse inspections, corrective actions, and logs shall be maintained for at least five years and made available to Puget Sound Clean Air Agency personnel upon request.
[PSCAA Order of Approval No. 11681, Condition 15]

2.101 Ash Grove shall maintain records of date, type, and quantity of on-site generated non-hazardous waste derived materials incinerated.

[PSCAA Order of Approval No. 5687, Condition 6]

2.102 Ash Grove shall measure and record, each calendar day, the total weight of whole tires injected as non-hazardous secondary material fuel as defined by 40 CFR 241.4(a)(1).

[PSCAA Order of Approval No. 12003, Condition 3]

2.103 Ash Grove shall report any deviation from the fuel monitoring plan that represent a potential threat to human health or safety as soon as possible but no later than 12 hours after such a deviation is discovered. Ash Grove shall report other deviations in writing to Puget Sound Clean Air Agency Operating Permit Certification no later than 30 days after the end of the month during which the deviation is discovered.

[PSCAA Order of Approval No. 12003, Condition 8]

2.104 Ash Grove shall log as part of the Operations and Maintenance Plan and report to the Puget Sound Clean Air Agency as part of the monthly Continuous Emission Monitoring Report:

a. The date, start and end times, and the fuel used for kiln startup-preheating periods prior to feed introduction;
b. The sulfur ring removal from the kiln, if the ring formation required the kiln to be shut down;
c. The date, start and end times for kiln startup-feed introduction periods; and
d. The cause for kiln shut down, the duration of kiln cool down and the kiln rotation schedule in kiln cool down.

[PSCAA Order of Approval No. 11681, Condition 10]

2.105 Ash Grove shall monitor and report CO, NO_X, SO_2, and opacity emissions from the main kiln baghouse according to Specific Condition **2.96**. SO_2 emissions from the main stack shall be monitored at all times following the introduction of feed to the kiln.

[PSCAA Order of Approval No. 11681, Condition 11]

2.106 Ash Grove shall monitor and report PM emissions from the main kiln baghouse according to Specific Condition **2.96**, paragraphs **d.**, **e.**, and **f.(1)**-**f.(3)**.

[PSCAA Order of Approval No. 11681, Condition 12]
[Regulation I, Articles 12.03 (d), 12.03 (e), and 12.03 (f)(1-3)]

2.107 40 CFR 63, Subpart LLL - Notification Requirements.

a. The notification provisions of 40 CFR 63, Subpart A that apply and those that do not apply to owners and operators of affected sources subject to 40 CFR 63, Subpart LLL are listed in Table 1 of 40 CFR 63, Subpart LLL, as shown in paragraph c. of this condition. If the Agency requires a notice that contains all of the information required in a notification listed in this condition, the owner or operator may send the EPA Administrator a copy of the notice sent to the Agency to satisfy the requirements of this condition for that notification.
b. The owner or operator shall comply with the notification requirements in 40 CFR 63.9 [Link to 40 CFR 63.9] as follows:
   (1) Notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e) [Links to 40 CFR 63.7 and 63.9(e)].
   (2) Notification of opacity and visible emission observations required by 40 CFR 63.1349 [Link to 40 CFR 63.1349] (see Specific Condition **2.45** in accordance with 40 CFR 63.6(h)(5) and 63.9(f) [Links to 40 CFR 63.6(h)(5) and 63.9(f)].
   (3) Notification, as required by 40 CFR 63.9(g) [Link to 40 CFR 63.9(g)], of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8 [Link to 40 CFR 63.8(e)] is scheduled to begin.

(4) Notification of compliance status, as required by 40 CFR 63.9(h) [Link to 40 CFR 63.9(h)].
(5) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of 40 CFR 63.7(b) and 63.9(e) [Links to 40 CFR 63.7(b) and 63.9(e)] do not apply to retesting required for exceedances under this subpart.

c. **Table 1 to Subpart LLL of Part 63—Applicability of General Provisions**

Citation	Requirement	Applies to Subpart LLL	Explanation
63.1(a)(1)-(4)	Applicability	Yes	
63.1(a)(5)		No	[Reserved].
63.1(a)(6)-(8)	Applicability	Yes	
63.1(a)(9)		No	[Reserved].
63.1(a)(10)-(14)	Applicability	Yes	
63.1(b)(1)	Initial Applicability Determination	No	§ 63.1340 specifies applicability.
63.1(b)(2)-(3)	Initial Applicability Determination	Yes	
63.1(c)(1)	Applicability After Standard Established	Yes	
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved].
63.1(c)(4)-(5)	Extensions, Notifications	Yes	
63.1(c)(6)	Reclassification	Yes	
63.1(d)		No	[Reserved].
63.1(e)	Applicability of Permit Program	Yes	
63.2	Definitions	Yes	Additional definitions in § 63.1341.
63.3(a)-(c)	Units and Abbreviations	Yes	
63.4(a)(1)-(3)	Prohibited Activities	Yes	
63.4(a)(4)		No	[Reserved].
63.4(a)(5)	Compliance date	Yes	
63.4(b)-(c)	Circumvention, Severability	Yes	
63.5(a)(1)-(2)	Construction/Reconstruction	Yes	
63.5(b)(1)	Compliance Dates	Yes	
63.5(b)(2)		No	[Reserved].
63.5(b)(3)-(6)	Construction Approval, Applicability	Yes	
63.5(c)		No	[Reserved].
63.5(d)(1)-(4)	Approval of Construction/Reconstruction	Yes	
63.5(e)	Approval of Construction/Reconstruction	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.5(f)(1)-(2)	Approval of Construction/Reconstruction	Yes	
63.6(a)	Compliance for Standards and Maintenance	Yes	
63.6(b)(1)-(5)	Compliance Dates	Yes	
63.6(b)(6)		No	[Reserved].
63.6(b)(7)	Compliance Dates	Yes	
63.6(c)(1)-(2)	Compliance Dates	Yes	
63.6(c)(3)-(4)		No	[Reserved].
63.6(c)(5)	Compliance Dates	Yes	
63.6(d)		No	[Reserved].
63.6(e)(1)-(2)	Operation & Maintenance	No	See § 63.1348(d) for general duty requirement. Any reference to § 63.6(e)(1)(i) in other General Provisions or in this subpart is to be treated as a cross-reference to § 63.1348(d).
63.6(e)(3)	Startup, Shutdown Malfunction Plan	No	Your operations and maintenance plan must address periods of startup and shutdown. See § 63.1347(a)(1).
63.6(f)(1)	Compliance with Emission Standards	No	Compliance obligations specified in subpart LLL.
63.6(f)(2)-(3)	Compliance with Emission Standards	Yes	
63.6(g)(1)-(3)	Alternative Standard	Yes	
63.6(h)(1)	Opacity/VE Standards	No	Compliance obligations specified in subpart LLL.
63.6(h)(2)	Opacity/VE Standards	Yes	
63.6(h)(3)		No	[Reserved].
63.6(h)(4)-(h)(5)(i)	Opacity/VE Standards	Yes	
63.6(h)(5)(ii)-(iv)	Opacity/VE Standards	No	Test duration specified in subpart LLL.
63.6(h)(6)	Opacity/VE Standards	Yes	
63.6(h)(7)	Opacity/VE Standards	Yes	
63.6(i)(1)-(14)	Extension of Compliance	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.6(i)(15)		No	[Reserved].
63.6(i)(16)	Extension of Compliance	Yes	
63.6(j)	Exemption from Compliance	Yes	
63.7(a)(1)-(3)	Performance Testing Requirements	Yes	§ 63.1349 has specific requirements.
63.7(b)	Notification period	Yes	Except for repeat performance test caused by an exceedance. See § 63.1353(b)(6).
63.7(c)	Quality Assurance/Test Plan	Yes	
63.7(d)	Testing Facilities	Yes	
63.7(e)(1)	Conduct of Tests	No	See § 63.1349(e). Any reference to 63.7(e)(1) in other General Provisions or in this subpart is to be treated as a cross-reference to § 63.1349(e).
63.7(e)(2)-(4)	Conduct of tests	Yes	
63.7(f)	Alternative Test Method	Yes	
63.7(g)	Data Analysis	Yes	
63.7(h)	Waiver of Tests	Yes	
63.8(a)(1)	Monitoring Requirements	Yes	
63.8(a)(2)	Monitoring	No	§ 63.1350 includes CEMS requirements.
63.8(a)(3)		No	[Reserved].
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1)-(3)	Conduct of Monitoring	Yes	
63.8(c)(1)-(8)	CMS Operation/Maintenance	Yes	Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63.8(d)	Quality Control	Yes, except for the reference to the SSM Plan in the last sentence	
63.8(e)	Performance Evaluation for CMS	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.8(f)(1)-(5)	Alternative Monitoring Method	Yes	Additional requirements in § 63.1350(l).
63.8(f)(6)	Alternative to RATA Test	Yes	
63.8(g)	Data Reduction	Yes	
63.9(a)	Notification Requirements	Yes	
63.9(b)(1)-(5)	Initial Notifications	Yes	
63.9(c)	Request for Compliance Extension	Yes	
63.9(d)	New Source Notification for Special Compliance Requirements	Yes	
63.9(e)	Notification of performance test	Yes	Except for repeat performance test caused by an exceedance. See § 63.1353(b)(6).
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/opacity test under § 63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes	
63.9(h)(1)-(3)	Notification of Compliance Status	Yes	
63.9(h)(4)		No	[Reserved].
63.9(h)(5)-(6)	Notification of Compliance Status	Yes	
63.9(i)	Adjustment of Deadlines	Yes	
63.9(j)	Change in Previous Information	Yes	
63.9(k)	Electronic reporting procedures	Yes	Only as specified in § 63.9(j).
63.10(a)	Recordkeeping/Reporting	Yes	
63.10(b)(1)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(i)-(ii)	General Recordkeeping Requirements	No	See § 63.1355(g) and (h).
63.10(b)(2)(iii)	General Recordkeeping Requirements	Yes	
63.10(b)(2)(iv)-(v)	General Recordkeeping Requirements	No	
63.10(b)(2)(vi)-(ix)	General Recordkeeping Requirements	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(1)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(2)-(4)		No	[Reserved].
63.10(c)(5)-(8)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(c)(9)		No	[Reserved].
63.10(c)(10)-(15)	Additional CMS Recordkeeping	Yes	PS-8A supersedes requirements for THC CEMS.
63.10(d)(1)	General Reporting Requirements	Yes	
63.10(d)(2)	Performance Test Results	Yes	
63.10(d)(3)	Opacity or VE Observations	Yes	
63.10(d)(4)	Progress Reports	Yes	
63.10(d)(5)	Startup, Shutdown, Malfunction Reports	No	See § 63.1354(c) for reporting requirements. Any reference to § 63.10(d)(5) in other General Provisions or in this subpart is to be treated as a cross-reference to § 63.1354(c).
63.10(e)(1)-(2)	Additional CMS Reports	Yes	
63.10(e)(3)	Excess Emissions and CMS Performance Reports	Yes	Exceedances are defined in subpart LLL.
63.10(e)(3)(v)	Due Dates for Excess Emissions and CMS Performance Reports	No	§ 63.1354(b)(9) specifies due date.
63.10(e)(3)(vii) and (viii)	Excess Emissions and CMS Performance Reports	No	Superseded by 63.1354(b)(10).
63.10(f)	Waiver for Recordkeeping/Reporting	Yes	
63.11(a)-(b)	Control Device Requirements	No	Flares not applicable.
63.12(a)-(c)	State Authority and Delegations	Yes	
63.13(a)-(c)	State/Regional Addresses	Yes	
63.14(a)-(b)	Incorporation by Reference	Yes	

Citation	Requirement	Applies to Subpart LLL	Explanation
63.15(a)-(b)	Availability of Information	Yes	

[40 CFR 63.1353]

2.108 40 CFR 63, Subpart LLL - Reporting Requirements.

a. The reporting provisions of 40 CFR 63, Subpart A [Link to 40 CFR 63, Subpart A] that apply and those that do not apply to owners or operators of affected sources subject to 40 CFR 63, Subpart LLL are listed in Table 1 of 40 CFR 63, Subpart LLL, as shown in paragraph c. of Specific Condition 2.99. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

b. The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR 63, Subpart A as follows:

(1) As required by 40 CFR 63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by 40 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349 (see Specific Condition **2.45**).

(3) As required by 40 CFR 63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by 40 CFR 63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(5) As required by 40 CFR 63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).

(6) As required by 40 CFR 63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

(7) The owner or operator shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in 40 CFR 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the

method in which the reports are submitted. The report must contain the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

(a) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1346(a) and (b) (see Specific Condition **2.38**);

(b) Notification of any failure to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(g)(1)(iii) (see Specific Condition **2.86.a.(3)**); and

(c) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1347(a)(3) (see Specific Condition **2.40.a.(3)**).

(d) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347(a) (see Specific Condition **2.40.a.**)

(e) For each PM CPMS, HCl, Hg, and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.

(f) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.

(8) If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

(9) Report Submittal.

(a) Within 60 days after the date of completing each performance evaluation or test, as defined in 40 CFR 63.2, conducted to demonstrate compliance with any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically via CEDRI and by using the Electronic Reporting Tool (ERT) (see *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*). For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 63.13.

(b) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.

(10) All reports required by this subpart not subject to the requirements in paragraphs (b)(9) introductory text and (b)(11)(i) of this section must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. The Administrator or the Agency may request a report in any form suitable for the specific case (*e.g.,* by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraphs b.(7) introductory text and b.(9)(a) of this section in paper format.

c. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by 40 CFR

63.1354(b)(9) (see paragraph **b.(7)** of this condition). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1348(d), (see Specific Condition **2.44**) including actions taken to correct a malfunction.

[40 CFR 63.1354]

2.109 40 CFR 63, Subpart LLL - Recordkeeping Requirements.

a. The owner or operator shall maintain files of all information (including all reports and notifications) required by this permit recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

b. The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and
   (1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;
   (2) All records of applicability determination, including supporting analyses; and
   (3) If the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.

c. In addition to the recordkeeping requirements in paragraph b. of this condition, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by 40 CFR 63.10(c).

d. You must keep records of the daily clinker production rates according to the clinker production monitoring requirements in 40 CFR 63.1350(d) (see Specific Condition **2.85**).

e. You must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.

f. Exceedance Due to Malfunctions.
   (1) You must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.
   (2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1348(d) (see Specific Condition **2.44)** including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

g. For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific

actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.

[40 CFR 63.1355]

Compliance Assurance Monitoring.

2.110 Applicability. The Kiln is subject to the Compliance Assurance Monitoring (CAM) requirements contained in Specific Conditions **2.110** - **2.127** for the controlled emissions of particulate matter. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to PSCAA Regulation I, Section 3.05.

[WAC 173-401-615(4)]
[40 CFR 64]

40 CFR 64.6 Approval of Monitoring.

2.111 The attached CAM Plan/Monitoring Approach Table (see Specific Condition **2.127**) is approved for the purposes of satisfying the requirements of 40 CFR 64.3.

[40 CFR 64.6(a)]

2.112 The attached CAM Plan/Monitoring Approach Table (see Specific Condition **2.127**) includes the following information:

a. The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
b. The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
c. The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

[40 CFR 64.6(c)(1)]

2.113 The attached CAM Plan/Monitoring Approach Table (see Specific Condition **2.127**) describes the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see Specific Conditions **2.114** - **2.118**) and reporting exceedances or excursions (see Specific Conditions **2.119** – **2.123**).

[40 CFR 64.6(c)(2)]

2.114 The Permittee is required to conduct the monitoring specified in the attached CAM Plan/Monitoring Approach Table (see Specific Condition **2.126**) and shall fulfill the obligations specified in the conditions below (see Specific Conditions **2.113** - **2.125**).

[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

2.115 Commencement of Operation. The owner or operator shall conduct the monitoring required under these monitoring conditions upon the effective date of this Air Operating Permit (AOP).

[40 CFR 64.7(a)]

2.116 Proper Maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b)]

2.117 Continued Operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-

specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

2.118 Response to Excursions or Exceedances.

a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

2.119 Documentation of Need for Improved Monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

2.120 Quality Improvement Plan. Based on the results of a determination made under Specific Condition **2.117.b.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with Specific Condition **2.113**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

2.121 Elements of a QIP.

a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
   (1) Improved preventive maintenance practices.
   (2) Process operation changes.
   (3) Appropriate improvements to control methods.
   (4) Other steps appropriate to correct control performance.
   (5) More frequent or improved monitoring (only in conjunction with one or more steps under Specific Conditions **2.120.b.(1)** through **(4)**, above).

[40 CFR 64.8(b)]

2.122 If a QIP is Required. If required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

2.123 Following Implementation of a QIP. Upon any subsequent determination pursuant to Specific Condition **2.117.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

a. Failed to address the cause of the control device performance problems; or
b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

2.124 Effect of QIP on Existing Requirements. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

2.125 General Reporting Requirements.

a. Commencing from the effective date of this permit, the owner or operator shall submit monitoring reports semi-annually to the compliance authority in accordance with WAC 173-401-615. In addition to deviations from any other permit requirement, the semi-annual reports shall also include all instances of deviations from the CAM requirements.
b. A report for monitoring under this part shall include, at a minimum, the information required under WAC 173-401-615. ., and the following information, as applicable:
   (1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
   (2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
   (3) A description of the actions taken to implement a QIP during the reporting period as specified in Specific Conditions **2.119** through **2.123.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation

of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

[WAC 173-401-615]

2.126 General Recordkeeping Requirements.

a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-WAC 173-401-615. (a)(3)(ii). The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to Specific Conditions **2.119** through **2.123** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

2.127 Effect of CAM on Other Requirements. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to Title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

2.128 CAM Plan/Monitoring Approach Requirements.

	Indicator No. 1	**Indicator No. 2**
I. Indicator	Change in duct Particulate Loading.	Opacity

	Indicator No. 1	Indicator No. 2
Measurement Approach	Particulate Matter Continuous Parameter Monitoring System (PM CPMS).	Continuous Opacity Monitoring System (COMS)
II. Indicator Range	An excursion is defined as any daily reading of the 30-day rolling average in excess of the operating limit established pursuant to 40 CFR 63.1349(b)(1) (See Specific Conditions **2.68** through **2.75**). Excursions trigger an inspection, corrective action, and a reporting requirement pursuant to 40 CFR 63.1350(b)(1). (See Specific Condition **2.84**)	An excursion is defined as Opacity from the kiln baghouse that exceeds 5 percent opacity for a one hour average. Excursions trigger an inspection, corrective action, and a reporting requirement
III. Performance Criteria **A. Data Representativeness**	The PM CPMS provides a reading in milliamps that is correlated with load and operating conditions during the annual particulate matter compliance tests.	Must comply with to PSCAA Reg I, Article 12
B. Verification of Operational Status	According to manufacturer per 40 CFR 63.8(c)(3).	Complies with Performance Specification 1 of Appendix B to Part 60, Title 40
C. QA/QC Practices	The PM CPMS system is audited according to the site-specific monitoring plan required by 40 CFR 63.1350(p). The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.	The COMS on the main kiln stack will be operated in accordance with EPA's Recommended Quality Assurance Procedures for Opacity Continuous Monitoring Systems, EPA 340/1-86-010
D. Monitoring Frequency	Particulate matter equivalent milliamps (operating limit) is monitored continuously.	Opacity is monitored continuously

	Indicator No. 1	Indicator No. 2
E. Data Collection Procedures	The PM CPMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.	Readings are digitally recorded and must comply with Performance Specification 1 of Appendix B to Part 60, Title 40
F. Averaging Period	30 kiln operating day rolling average.	One hour.

[40 CFR 64.6(c)]

2.129 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

2.130 40 CFR 63, Subpart A – General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 63, Subpart A, see **Attachment 4. 40 CFR 63, Subpart A – General Provisions**.

[WAC 173-401-615]

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B. Emission Unit #2: Coal Processing, Storage and Transfer Facilities

The requirements in Table 3 apply to Emission Unit No. 2 – Coal Processing, Storage and Transfer Facilities. This emission unit consists of multiple pieces of equipment, consisting of four coal storage, processing and transfer, and loading systems that are subject to 40 CFR 60, Subpart A - General Provisions and 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants. The affected facilities are the Permittee's equipment numbers 41B.FN1 (Coal Feeder #1), 41B.FN2 (Coal Feeder #2), 41A.BF3 (Raw Coal Silo), and 41C.BF1 (Pulverized Fuel Bin). Subpart Y also regulates the #1 and #2 coal mills, but the applicable requirements for those units appear in Section 2.A., above.

In addition to the applicable requirements listed in this section, these material handling activities are also subject to the plant-wide requirements in Section 1. of this permit.

Table 3. Applicable Requirements Related to Coal Processing, Storage and Transfer Facilities

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.131	**Good Operational Practices** 40 CFR 60.11(d)	At all times, including SSM periods, the owner or operator shall to the extent practicable maintain and operate Subpart Y affected facilities including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions.	O&M Plan Inspections (See **Attachment 3. 40 CFR 60, Subpart A – General Provisions**)	N/A
2.132	**Particulate Matter (PM):** 40 CFR 60.253(a)(1)	**Coal Mill – Pneumatic Coal-Cleaning Equipment** The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf)	Performance Tests (See Specific Condition **2.134**)	EPA Method 5
2.133	**Opacity** 40 CFR 60.253(a)(2) 40 CFR 60.254(a) 40 CFR 60.255(a) 40 CFR 60.11(c)	**Coal Mill – Pneumatic Coal-Cleaning Equipment** Except during periods of startup, shutdown, malfunction, the owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit 10 percent opacity or greater. **Coal Mill - Coal Processing and Conveying Equipment, Coal Storage Systems, Transfer and Loading Systems, and Open Storage Piles** The owner or operator shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal gases which exhibit 20 percent opacity or greater.	Opacity Tests (See Specific Condition **2.133**)	EPA Method 9

COMPLIANCE METHODS

2.134 Opacity Tests. The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs a. through c.

a. Method 9 of Appendix A-4 of 40 CFR 60 and the procedures in 40 CFR 60.11 (See **Attachment 3. 40 CFR 60, Subpart A – General Provisions**) must be used to determine compliance with the opacity standard in Specific Condition **2.132**, with the exceptions specified in paragraphs a.(1) and a.(2):
   (1) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).
   (2) If, during the initial 30 minutes of the observation of a Method 9 performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

b. To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs b.(1) through b.(3) must be used.
   (1) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
   (2) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
   (3) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

c. A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs c.(1) through c.(3) are met.
   (1) No more than three emissions points may be read concurrently.
   (2) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
   (3) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[40 CFR 60.257(a)]

2.135 PM Tests. The owner or operator must determine compliance with the applicable particulate matter standards as specified in paragraphs a. through e.

a. Method 1 or 1A of appendix A-4 of 40 CFR 60 shall be used to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

b. Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-4 of 40 CFR 60 shall be used to determine the volumetric flow rate of the stack gas.

c. Method 3, 3A, or 3B of appendix A-4 of 40 CFR 60 shall be used to determine the dry molecular weight of the stack gas. The owner or operator may use ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses (incorporated by reference—*see* 40 CFR 60.17) (See **Attachment 3. 40 CFR 60, Subpart A – General Provisions**) as an alternative to Method 3B of appendix A-2 of 40 CFR 60.

d. Method 4 of appendix A-4 of 40 CFR 60 shall be used to determine the moisture content of the stack gas.

e. Method 5 or 5D of appendix A-4 of 40 CFR 60 shall be used to determine the PM concentration as follows:

(1) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin. A minimum of three valid test runs are needed to comprise a PM performance test.
(2) Method 5 of appendix A of 40 CFR 60 shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.
(3) (iv) Method 5D of appendix A of 40 CFR 60 shall be used for positive pressure fabric filters and other similar applications (*e.g.,* stub stacks and roof vents).

[40 CFR 60.257(b)]

2.136 Testing Frequency.

a. *Opacity*. The equipment in this emissions unit shall be tested for opacity annually during years in which the Coal Processing, Storage and Transfer Facilities are used.
b. *PM*. The equipment in this emissions unit shall be tested for particulate matter emissions once during the term of this permit if the Coal Processing, Storage and Transfer Facilities are used.

[WAC 173-401-615(1)(b) and (3)(b)]

2.137 Reporting and Recordkeeping.

a. For the purpose of reports required under 40 CFR 60.7(c) (See **Attachment 3. 40 CFR 60, Subpart A – General Provisions**), the owner or operator shall report semiannually periods of excess emissions as follow:
   (1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test.
   (2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test.
   (3) All 6-minute average opacities that exceed the applicable standard.
b. Within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this 40 CFR 60, Subpart Y, the owner or operator of the affected facility must submit the test data to EPA by successfully entering the data electronically into EPA's WebFIRE data base available at *http://cfpub.epa.gov/oarweb/index.cfm?action* = *fire.main.* For performance tests that cannot be entered into WebFIRE (*i.e.,* Method 9 of appendix A-4 of 40 CFR 60 opacity performance tests) the owner or operator of the affected facility must mail a summary copy to United States Environmental Protection Agency; Energy Strategies Group; 109 TW Alexander DR; mail code: D243-01; RTP, NC 27711.
c. **Note**: See also **Section 5: General Compliance Requirements** for additional requirements, including testing, notification and reporting.

[40 CFR 60.258(b) & (d)]

2.138 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

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C. Emission Unit #3: Material Handling Activities.

This emission unit consists of a group of equipment used for handling and processing the raw and finished materials throughout the plant. The affected facilities included in this group are: Transfer Towers 2, 3, 5, 6, 7, 8, 10A, and 11; Equipment/system Numbers 216 - (Limestone Transfer Tower) [NOC 11681], 311 - Limestone Reclaim [NOC 11681], 311.ST1 (Stacker), 311.RE1 (Reclaimer), 311.BC4 (Limestone Conveyor Belt), 311.BE1 (Limestone Bucket Elevator) [NOC 9578], P11.TD (Truck Dump), 312-Clay/Shale Reclaim [NOC 11681], 312.FA1 (Feeder), 312.7G1 (Clay Storage Shed), 314 - Iron Reclaim [NOC 11681], 315 - Raw Mill Feed [NOC 11681], 315.BN1 (Limestone Storage Bin), 315.BN2 (Clay Storage Bin), 315.BN3 (Silica Storage Bin), 315.BN4 (Slag Storage Bin), 315.FA1 (Clay Apron Feeder), 316 - Raw Mill [NOC 11681], 317 - Transport to Blending, 411 - Feed Blending and Storage (Dry), 411.SX1, 411.SX2 (Raw Meal Blending, 411.SX3, 411.SX4 (Raw Meal Storage Silos), 419 - Clinker Conveying, with 24 Baghouses of various sizes (circa 1990) [NOC 11681], 419.BC6 (Clinker Shed Tripper) [NOC 8600], 511.BC5 (Clinker/Gypsum Conveyor) [NOC 9769], 611.BK1 (Cement Loadout Bulk Bag/Group II Cement Silos) [NOC 8643 & 10695], 41A - Coal Silo [NOC 11681], 41B - Raw Coal Bin and Feed and Coal Mill [NOC 11681], 41B.SX1 (Raw Coal Storage Silos), 41C - Coal Mill and firing equipment [NOC 11681], Fuller FK Material Pump; and, Ramsey Horizontal Rotary Gravimetric Metering System [NOC 8415].

These material handling activities are subject to 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart F – Standards of Performance for Portland Cement Plants. Subpart F also regulates the kiln and raw mill, but the Subpart F requirements for those units are set forth in Section 2.A., above. These activities are also subject to regulation pursuant to 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. (the raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading, and unloading systems are not subject to Subpart LLL because this facility is not a major source of HAP).

In addition to the applicable requirements listed in this section, these material handling activities are also subject to the plant-wide requirements in Section 1. of this permit.

Table 4. Applicable Requirements Related to Portland Cement NSPS Affected Facilities

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.139	Condition 1 of Puget Sound Clean Air Agency Order of Approval Nos. 8415 (3/20/21), 8600 (2/8/02), 8643 (3/21/02), 9578 (2/13/07), 9769 (2/12/08), 10695 (2/4/14), 11681 (4/8/2019),	The Permittee is granted approval to install or establish only the device or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by OA 8415, OA 8600, OA 8643, OA 9578, OA 9769, OA 10695, and OA 11681.	Construction Records	NA
2.140	**PM_{10}** Puget Sound Clean Air Agency Order of Approval No. 8600 Condition 3	**Clinker Storage Shed** The PM-10 emissions from the Pulse Jet R-08-88-81 Baghouse shall not exceed 0.005 grains/dscf over a 24-hour period.	(See Specific Condition **2.145**)	Method 22

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.141	**PM_{10}** Puget Sound Clean Air Agency Order of Approval No. 8643 Condition 3	**Group II Cement Silos** The PM-10 emissions from the two Pulse Jet Dust Collectors shall not exceed 0.005 grains/dscf over a 24-hour period.	(See Specific Condition **2.145**)	Method 22
2.142	**PM_{10}** Puget Sound Clean Air Agency Order of Approval No. 9578 Condition 4	**Limestone Conveyor Belt and Bucket Elevator** Ash Grove shall not allow the emissions of PM_{10} from the Bucket Elevator baghouse and the Conveyor baghouse to exceed 0.005 gr/dscf over a 24-hour period.	(See Specific Condition **2.145**)	Method 22
2.143	**Visible Emissions** Puget Sound Clean Air Agency Order of Approval Nos. 9769 Condition 4, 10695 Condition 3	**Clinker/Gypsum Conveyor and Baghouses** **Group II Silo Baghouses** There shall be no visible emissions or fallout from these dust collectors.	Pressure drop monitoring and Inspections (See Specific Conditions **2.148** – **2.151**)	Method 22
2.144	**PM_{10}** Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 4	**All Baghouses, Except Main Kiln Baghouse** PM_{10} emissions from each baghouse, except the main kiln baghouse, shall not exceed 0.005 grains/dscf over a 24-hour period.	(See Specific Conditions **2.145** and **2.146**)	Method 22
2.145	40 CFR 60.62(c)	The material handling activities in this emissions unit may not emit any gases which exhibit 10 percent opacity, or greater.	Opacity Monitoring (See Specific Conditions **2.152** - **2.155**)	Method 22 Method 9

COMPLIANCE METHODS

2.146 PM_{10} Compliance. Ash Grove shall demonstrate compliance with the PM_{10} standard in Specific Conditions **2.139**, **2.140, 2.141,** and **2.143** by any of the following:

a. Performing a Puget Sound Clean Air Agency-approved source test according to EPA Method 5 or EPA Method 201A;
b. Demonstrating no visible emissions for 15 consecutive seconds;
c. Demonstrating no visible emissions for three consecutive minutes; or
d. Repairing within 24 hours, any baghouse that has visible emissions for more than three consecutive minutes.

[PSCAA Order of Approval No. 8600, Condition 3]
[PSCAA Order of Approval No. 8643, Condition 3]
[PSCAA Order of Approval No. 9578, Condition 4]
[PSCAA Order of Approval No. 11681, Condition 4]

2.147 Visible Emissions Compliance. Compliance shall be determined for visible emissions using EPA Method 22. The Puget Sound Clean Air Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107.

[PSCAA Order of Approval No. 8600, Condition 4]

[PSCAA Order of Approval No. 8643, Condition 4]
[PSCAA Order of Approval No. 9578, Condition 5]
[PSCAA Order of Approval No. 11681, Condition 4]

2.148 Inspections and Corrective Actions – Limestone Conveyor Belt and Bucket Elevator. Ash Grove shall conduct monthly inspections of the Limestone Conveyor Belt and Bucket Elevator for visible emissions. Inspections are to be performed while the equipment is in operation during daylight hours. If, during the scheduled inspection or at any other time, visible emissions other than uncombined water are observed, Ash Grove shall, as soon as possible, but no later than 24 hours after the initial observation, take corrective action until there are no visible emissions, shut down the unit or activity until it can be repaired or conduct a reference method opacity observation. If a reference method opacity observation reveals an exceedance of the applicable visible emissions limit, report the observation as a deviation and shut the unit down until repairs are complete and a non-reference method visible emissions observation reveals no visible emissions.

[PSCAA Order of Approval No. 9578, Condition 6]

2.149 Baghouse Pressure Drop Monitoring. The Clinker/Gypsum Conveyor and the Group II Silo baghouses/dust collectors shall be equipped with gauges to measure the pressure drop across the filters. The acceptable/normal operating range of pressure drop shall be clearly marked on (or near) the gauges and shall be included in the Operation & Maintenance plan.

[PSCAA Order of Approval No. 9769, Condition 5]
[PSCAA Order of Approval No. 10695, Condition 4]

2.150 Corrective Actions - Clinker/Gypsum Conveyor Baghouses. Ash Grove shall record the pressure drop across the Clinker/Gypsum Conveyor filters during each shift when the baghouse is in operation. If the pressure drop across the exhaust filters of the baghouse is not within the acceptable range, Ash Grove shall take corrective actions within 24 hours in accordance with the O&M Plan or cease operation of the equipment until the problem is repaired. Ash Grove shall maintain records of these corrective actions on site for at least five years and make them available to Puget Sound Clean Air Agency personnel upon request.

[PSCAA Order of Approval No. 9769, Condition 6]
[WAC 173-401-615(2)(c)]

2.151 Corrective Actions – Group II Silos. The Group II Silo baghouses/dust collectors shall be inspected monthly while in operation. If any exhibit visible emissions or fallout or are operating outside of the normal pressure drop range, Ash Grove shall take corrective actions (as specified in the Operations and Maintenance Plan) within 24 hours of the initial observation.

[PSCAA Order of Approval No. 10695, Condition 5]

2.152 Record Retention. Records fully documenting all inspections and corrective actions shall be maintained for at least 5 years and be made available to Puget Sound Clean Air Agency personnel upon request.

[PSCAA Order of Approval No. 9578, Condition 7]
[PSCAA Order of Approval No. 10695, Condition 6]

2.153 Opacity Monitoring.

a. You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7 to 40 CFR 60. The performance test must be conducted while the affected source is in operation.
b. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test,

you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

c. If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
d. If visible emissions are observed during any Method 22 performance test, of Appendix A-7 to 40 CFR 60, you must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A-4 to 40 CFR 60. The Method 9 performance test, of Appendix A-4 to 40 CFR 60, must begin within 1 hour of any observation of visible emissions.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test, of Appendix A-7 to 40 CFR 60, according to the requirements of Paragraphs a. through d. of this condition for each such conveying system transfer point located within the building, or for the building itself, according to Paragraph g. of this condition.
g. If visible emissions from a building are monitored, the requirements Paragraphs a. through d. of this condition apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
h. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs a. through g., you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(f)(1) & (3)]

2.154 Alternate Monitoring Requirements Approval. You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 CFR 60, Subpart F subject to the provisions of paragraphs a. through f. of this condition.

a. The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
b. If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
c. You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (c)(1) through (c)(3) of this condition:
   (1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
   (2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and

(3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

d. The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:
   (1) Notice of the information and findings upon which the intended disapproval is based; and
   (2) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

e. You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

f. The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(o)]

2.155 Development and Submittal (upon request) of Monitoring Plans. If you demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs a. through d. of this. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o) (see Specific Condition **2.207**) and 40 CFR 63.8(f). In your site-specific monitoring plan, you must also address paragraphs a. through c. of this condition.

a. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);

b. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and

c. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). (See also **Attachment 4. 40 CFR 63, Subpart A – General Provisions** of this permit for the general requirements of Subpart A of 40 CFR 63.)

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(p)(1) & (p)(2))]

2.156 Compliance Test Report Submission. Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by 40 CFR 60, Subpart F, you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information

claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

[40 CFR 60.64(d)(1)]

2.157 Open Clinker Storage Pile. The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (40 CFR 63.1347, see Specific Condition **2.157**), that is appropriate for the site conditions as specified in paragraphs a. through c. of this condition. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.

a. The operation and maintenance plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the owner or operator will use to minimize fugitive dust emissions from each open clinker storage pile.
b. For open clinker storage piles, the operations and maintenance plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents, use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. You must select, for inclusion in the operations and maintenance plan, the fugitive dust control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.
c. Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days.

[40 CFR 63.1343(c)]

2.158 Operation and Maintenance Plan Requirements.

a. You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:
   (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of 40 CFR 63.1343. (see Specific Condition **2.156**). Your operations and maintenance plan must address periods of startup and shutdown.
   (2) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.
b. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347]

2.159 General Duty to Minimize Emissions. At all times you must 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.

[40 CFR 63.1348(d)]

2.160 40 CFR 63, Subpart LLL - Notification Requirements. See Specific Condition **2.106**.

[40 CFR 63.1353 and Table 1]

2.161 40 CFR 63, Subpart LLL - Reporting Requirements. See Specific Condition **2.107**.

[40 CFR 63.1354]

2.162 40 CFR 63, Subpart LLL - Record Keeping Requirements. See Specific Condition **2.108**.

[40 CFR 63.1355]

2.163 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

2.164 40 CFR 63, Subpart A – General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 63, Subpart A, see **Attachment 4. 40 CFR 63, Subpart A – General Provisions.**

[WAC 173-401-615]

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D. Emission Unit #4: Finish Mill System

The Finish Mill System consists of two finish mills that are each rated at 55 tons per hour (installed in 1968) and, two 60-ton/hour Finish Mill High Efficiency separators controlled by two nominal two 77,000 cfm Baghouses (515.BF2, 525.BF2) (authorized by NOC 11681, initially authorized in 1994 by NOC 5730) and two nominal 20,000 acfm mill sweep baghouses [NOC 5276]. This emissions unit also includes a pneumatic conveying system for shuttling clinker dust (CKD) from the main baghouse to the finish mills, including a 300 ton CKD storage silo controlled by a FLS Model 64TA I0FM baghouse and a FLS Model 25TA I0FM baghouse for the 25 ton fringe bin [NOC 10742]. The clinker from the kiln that is passed through the G-Cooler becomes processed in the ball mills by grinding with gypsum to form cement and sent to the cement silos for storage.

In addition, this emissions unit also includes one portable MB America model BF 120.4 S2 crusher bucket rated at 65 yd^3/hr for crushing of kiln refractory brick, kiln coating (clinker), and raw mill rejects (oversize limestone or gypsum), and finish mill (oversize clinker) rejects [NOC 11436]. The crusher bucket is an attachment for a backhoe or skid loader. When used for raw mill rejects, it's considered part of the raw mill. When used for refractories or finish mill rejects, it's considered part of the finish mill. Oversize materials are >3" in diameter. The crusher bucket is subject to regulation under 40 CFR 60, Subpart A – General Provisions and 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants.

The finish mills and related systems collectively regulated in this emissions unit are subject to regulation under 40 CFR 60 Subpart A – General Provisions, 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants, 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, as shown below.

In addition to the applicable requirements listed in this section, the finish mills are also subject to the plant-wide requirements in Section 1. of this permit.

Table 5. Applicable Requirements Related to Finish Mills

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference
2.165	Puget Sound Clean Air Agency Order of Approval No. 5276 Condition 1 (1/19/94)	The Permittee is granted approval to install or establish only the device or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by OA 5276.	Construction Records	N/A
2.166	Puget Sound Clean Air Agency Order of Approval No. 10742 Condition 1 (5/22/14)	The Permittee is granted approval to install or establish only the device or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by OA 10742.	Construction Records	N/A

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference
2.167	Puget Sound Clean Air Agency Order of Approval No. 11681 Condition 1	The Permittee is granted approval as provided in Article 6 of Regulation I of the Puget Sound Clean Air Agency to the applicant to install or establish the equipment, device or process described hereon at the installation address in accordance with the plans and specifications on file in the Engineering Division of the Puget Sound Clean Air Agency as approved by OA 11681.	Construction Records	N/A
2.168	**PM** Puget Sound Clean Air Agency Order of Approval No. 5276 Condition 4	Particulate emissions from the two baghouses connected to the finish mill grinding system shall not exceed 0.01gr/dscf.	Stack Test (see Specific Condition **2.174**)	EPA Method 5 with back half
2.169	**PM_{10}** Puget Sound Clean Air Agency Order of Approval No. 11681, Condition 4	PM_{10} emissions from each baghouse shall not exceed 0.005 grains/dscf over a 24-hour period.	See Specific Condition **2.175**	Method 5 Method 201A Method 22 for visible emissions
2.170	**Opacity** Puget Sound Clean Air Agency Order of Approval No. 5276 Condition 6	**Finish Mill System** Opacity from the exhaust from the two baghouses connected to the finish mill grinding system shall not exceed 10% for an aggregate of 3 minutes in any 1 hour.	Opacity Monitoring See Specific Condition **2.176**	Method 9 Method 22
2.171	**Visible Emissions** Puget Sound Clean Air Agency Order of Approval No. 10742 Conditions 4 And Condition 5	**CKD Storage Silo and Fringe Bin** There shall be no visible emissions from the conveyor transfer points (CKD storage silo and fringe bin). There shall be no visible emissions or fallout from the baghouses.	Inspections and proper operation. (See Specific Conditions **2.177** through **2.179**)	NA
2.172	**Pressure Drop** Puget Sound Clean Air Agency Order of Approval No. 5276 Condition 7)	**Finish Mill System** Pressure drop across the baghouses connected to the finish mill grinding system shall be maintained between 3 and 6 inches.	Measure and record pressure drop across the baghouses	NA
2.173	**Opacity** Puget Sound Clean Air Agency Order of Approval No. 11436 Conditions 5 & 6	**Crusher Bucket** Opacity from the crusher bucket (as part of the finish mill system) shall not exceed 10%	Opacity Monitoring See Specific Conditions **2.180** through **2.183**	Method 9 Method 22

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference
2.174	**Opacity** 40 CFR 60.62(c)	**Finish Mill System** You may not discharge into the atmosphere from any affected facility other than the kiln and clinker cooler any gases which exhibit 10 percent opacity, or greater.	See Specific Conditions **2.178** through **2.181**	Method 22 Method 9

COMPLIANCE METHODS

2.175 PM Compliance. The Permittee shall demonstrate compliance with PM standard in Specific Condition **2.167** by performing a stack test using EPA Method 5, with back half, once every five years prior to renewal of the air operating permit.

[PSCAA Order of Approval No. 5276, Condition 4]
[WAC 173-401-615(1)(b)]

2.176 PM_{10} Compliance. The Permittee shall demonstrate compliance with the PM_{10} standard in Specific Condition **2.168** by any of the following:

a. Performing a Puget Sound Clean Air Agency-approved source test according to EPA Method 5 or EPA Method 201A;
b. Demonstrating no visible emissions for 15 consecutive seconds;
c. Demonstrating no visible emissions for three consecutive minutes; or
d. Repairing within 24 hours, any baghouse that has visible emissions for more than three consecutive minutes.

Compliance shall be determined for visible emissions using EPA Method 22. The Puget Sound Clean Air Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107.

[PSCAA Order of Approval No. 11681, Condition 4]

2.177 Pressure Drop. The Permittee shall measure and record the pressure drop across the baghouses to demonstrate compliance with Specific Condition **2.171**.

[PSCAA Order of Approval No. 5276, Condition 7]

2.178 Pressure Drop. The CKD Storage Silo and Fringe Bin baghouses shall be equipped with a gauge to measure the pressure drop across the filters. The normal operating range of pressure drop shall be clearly marked on (or near) the gauge and be included in the Operation & Maintenance plan.

[PSCAA Order of Approval No. 10742, Condition 6]

2.179 Corrective Actions. The CKD Storage Silo and Fringe Bin baghouses shall be inspected during each month of operation. If the baghouses exhibit visible emissions or fallout or are operating outside of the normal pressure drop range, the Permittee shall discontinue CKD transfer operations until corrective action has been taken.

[PSCAA Order of Approval No. 10742, Condition 7]

2.180 Records. Records documenting all inspections and corrective actions shall be maintained for at least 5 years and be made available to Puget Sound Clean Air Agency personnel upon request.

[PSCAA Order of Approval No. 10742, Condition 8]

2.181 Opacity Monitoring.

a. You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7 to 40 CFR 60. The performance test must be conducted while the affected source is in operation.

b. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
c. If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
d. If visible emissions are observed during any Method 22 performance test, of Appendix A-7 to 40 CFR 60, you must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A-4 to 40 CFR 60. The Method 9 performance test, of Appendix A-4 to 40 CFR 60, must begin within 1 hour of any observation of visible emissions.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test, of Appendix A-7 to 40 CFR 60, according to the requirements of Paragraphs a. through d. of this condition for each such conveying system transfer point located within the building, or for the building itself, according to Paragraph g. of this condition.
g. If visible emissions from a building are monitored, the requirements Paragraphs a. through d. of this condition apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
h. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs a. through g., you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(f)(1) & (3)]

2.182 Alternate Monitoring Requirements Approval. You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 CFR 60, Subpart F subject to the provisions of paragraphs a. through f. of this condition.
a. The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
b. If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
c. You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (c)(1) through (c)(3) of this condition:
   (1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;

(2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
(3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

d. The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:
(1) Notice of the information and findings upon which the intended disapproval is based; and
(2) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

e. You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

f. The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(o)]

2.183 Development and Submittal (upon request) of Monitoring Plans. If you demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs a. through c. of this condition. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o) (see Specific Condition **2.182**) and 40 CFR 63.8(f). In your site-specific monitoring plan, you must also address paragraphs a. through c. of this condition.

a. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);

b. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and

c. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). (See also **Attachment 4. 40 CFR 63, Subpart A – General Provisions** of this permit for the general requirements of Subpart A of 40 CFR 63.)

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(p & (p)(2))]

2.184 Compliance Test Report Submission. Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by 40 CFR 60, Subpart F, you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT

Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

[40 CFR 60.64(d)(1)]

2.185 General Duty to Minimize Emissions. At all times you must 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.

[40 CFR 63.1348(d)]

2.186 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

2.187 40 CFR 63, Subpart A – General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 63, Subpart A, see **Attachment 4. 40 CFR 63, Subpart A – General Provisions.**

[WAC 173-401-615]

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E. Emission Unit #5: Two Cement Domes

The two cement storage domes are 45,000 ton finished product storage facilities, each controlled by a 6,000 acfm Alanco baghouse. The East Dome was installed in 1998, and the West Dome was installed in 2008. NOC 7242 approved construction of the East Cement Storage Dome and two Alanco baghouses serving that dome and the steel scale tanks (which are no longer in use). NOC 9711 approved construction of the West Cement Storage Dome and the transfer of the Alanco baghouse previously serving the scale tanks to serving the West Storage Dome. In addition to the applicable requirements listed in this section from NOC 7242, NOC 9711, and 40 CFR 60, Subparts A and F.

The Cement Storage Domes are also subject to the plant-wide requirements listed in Section 1. of this permit.

Table 6. Applicable Requirements Related to Cement Domes

Reqmt. No.	Enforceable Requirement Citation	Requirement Paraphrase	Compliance Method	Reference
2.188	Puget Sound Clean Air Agency Order of Approval No. 7242, Condition 1 (1/6/98) Puget Sound Clean Air Agency Order of Approval No. 9711, Condition 1 (1/2/08)	The Permittee is granted approval to install or establish only the device or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by OA 7242 and OA 9711.	Construction Records	NA
2.189	Puget Sound Clean Air Agency Order of Approval No. 7242, Condition 7 (1/6/98)	PM_{10} emissions from the Alanco baghouse controlling the East cement storage dome shall not exceed 0.005 grains/dscf over a 24- hour period.	See Specific Condition **2.195**, below.	EPA Method 5, EPA Method 201A, EPA Method 22
2.190	Puget Sound Clean Air Agency Order of Approval No. 9711, Condition 4 (1/2/08)	There shall be no visible emissions or fallout from the West cement storage dome and baghouse.	Visual Inspections, Complaints.	N/A
2.191	40 CFR 60.60 40 CFR 60.62(c)	The affected facilities (finished product storage including baghouses on the storage domes, conveyor transfer points, and loading systems) in this emissions unit may not emit any gases which exhibit 10 percent opacity, or greater.	See Specific Conditions **2.196** through **2.199**	Method 22 Method 9

COMPLIANCE METHODS

2.192 Baghouse Pressure Drop Monitoring. The Permittee shall install and maintain gauges to measure the pressure drop across each of the two Alanco Baghouse exhaust filters (serving the East Dome and the West Dome). The acceptable range for the gauges shall be clearly marked on or nearby the gauges.

[PSCAA Order of Approval No. 7242, Condition 4]
[PSCAA Order of Approval No. 9711, Condition 5]

2.193 Baghouse Pressure Drop Recording - East Dome. The Permittee shall determine and record if the pressure drop across the exhaust filters is in the acceptable range, once during each shift the Alanco Baghouse (serving the East Dome) is used.

[PSCAA Order of Approval No.7242, Condition 5]

2.194 Corrective Action - East Dome. The Permittee shall take corrective action as specified in the facility's Operation and Maintenance Plan, if the pressure drop across the exhaust filters of the Alanco Baghouse (serving the East Dome) is not within the acceptable range.

[PSCAA Order of Approval No. 7242, Condition 6]

2.195 Baghouse Pressure Drop Recording and Corrective Action - West Dome. The Permittee shall record the pressure drop across the filters during each shift when the Alanco Baghouse (serving the West Dome) is in operation. If the pressure drop across the exhaust filters of the baghouse is not within the acceptable range, The Permittee shall take corrective actions within 24 hours in accordance with the O&M Plan or cease adding cement to the storage dome until the problem is repaired. Ash Grove shall maintain records of these corrective actions on site for at least five years and make them available to Puget Sound Clean Air Agency personnel upon request.

[PSCAA Order of Approval No. 9711, Condition 6]
[WAC 173-401-615(2)(c)]

2.196 PM_{10} Compliance. The Permittee may demonstrate compliance with the PM_{10} limit in Specific Condition **2.185** by any of the following:

a. By performing a PSCAA-approved source test according to EPA Method 5 or EPA Method 201A;
b. By demonstrating no visible emissions for 15 consecutive seconds;
c. By demonstrating no visible emissions for 3 consecutive minutes; or
d. By repairing within 24 hours any baghouse that has visible emissions for more than three consecutive minutes. Compliance shall be determined for visible emissions using EPA Method 22. The Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107.

[PSCAA Order of Approval No. 7242, Condition 7]

2.197 Opacity Monitoring.

a. You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7 to 40 CFR 60. The performance test must be conducted while the affected source is in operation.
b. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
c. If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
d. If visible emissions are observed during any Method 22 performance test, of Appendix A-7 to 40 CFR 60, you must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A-4 to 40 CFR 60. The Method 9 performance test, of Appendix A-4 to 40 CFR 60, must begin within 1 hour of any observation of visible emissions.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test, of Appendix A-7 to 40 CFR 60, according to the requirements of Paragraphs a. through d. of this condition for each such conveying system transfer point located within the building, or for the building itself, according to Paragraph g. of this condition.
g. If visible emissions from a building are monitored, the requirements Paragraphs a. through d. of this condition apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
h. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs a. through g., you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(f)(1) & (3)]

2.198 Alternate Monitoring Requirements Approval. You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 CFR 60, Subpart F subject to the provisions of paragraphs a. through f. of this condition.

a. The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
b. If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
c. You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (c)(1) through (c)(3) of this condition:
   (1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
   (2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
   (3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
d. The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:
   (1) Notice of the information and findings upon which the intended disapproval is based; and
   (2) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.
e. You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

f. The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(o)]

2.199 Development and Submittal (upon request) of Monitoring Plans. If you demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs a. through c. of this condition. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o) (see Specific Condition **2.207**) and 40 CFR 63.8(f). In your site-specific monitoring plan, you must also address paragraphs a. through c. of this condition.

a. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);
b. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
c. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). (See **Attachment 4. 40 CFR 63, Subpart A – General Provisions** of this permit for the general requirements of Subpart A of 40 CFR 63.)

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(p)(1) & (p)(2))]

2.200 Compliance Test Report Submission. Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by 40 CFR 60, Subpart F, you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

[40 CFR 60.64(d)(1)]

2.201 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

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F. Emission Unit #6: Clinker Storage Shed

This emissions unit consists of a clinker storage shed controlled by a (one) Pulse Jet R-08-88-81 Baghouse rated at 20,000 cfm to control dust emissions from the Clinker Storage Shed during clinker transfer.

This emissions unit is subject to regulation under 40 CFR 60, Subpart A – General Provisions, 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants, 40 CFR 63, Subpart A – General Provisions and 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry.

In addition to the applicable requirements listed in this section, the Clinker Storage Shed is subject to the plant-wide requirements listed in Section 1.

Table 8. Applicable Requirements Related to Clinker Storage Shed.

Reqmt No.	Enforceable Requirement Citation	Requirement	Compliance Method	Reference Test Method (See Section 7)
2.202	Puget Sound Clean Air Agency Order of Approval No. 8600 Condition 1 (2/8/02)	The Permittee is granted approval to install or establish only the device or processes in accordance with the plans and specifications on file with the Puget Sound Clean Air Agency as approved by OA 8600	Construction Records	NA
2.203	Puget Sound Clean Air Agency Order of Approval No. 8600 Condition 3 (2/8/02)	PM_{10} emissions from the Pulse Jet R-08-88-81 baghouse (511.BF8) shall not exceed 0.005 grains/dscf over a twenty-four hour period.	See Specific Conditions **2.215** and **2.216**	PSCAA approved EPA Method 5 or EPA Method 201A 40 CFR 60 Method 22 (VEs)
2.204	40 CFR 60.62(c)	This emissions unit may not discharge into the atmosphere any gases which exhibit 10 percent opacity, or greater.	Opacity Monitoring (See Specific Conditions **2.217** through **2.220**)	Method 22 Method 9

COMPLIANCE METHODS

2.205 PM_{10} Emissions. Compliance with the PM_{10} standard in Specific Condition **2.213** may be demonstrated by any of the following:

a. By performing a Puget Sound Clean Air Agency-approved EPA Method 5 or EPA Method 201A;
b. Demonstrating no visible emissions for 15 consecutive seconds;
c. Demonstrating no visible emissions for 3 consecutive minutes; or
d. Repairing within 24 hours, any baghouse that has visible emissions for more than 3 consecutive minutes.

[PSCAA Order of Approval No. 8600, Condition 3]

2.206 Visible Emissions. Compliance shall be determined for visible emissions using 40 CFR 60 Method 22. Puget Sound Clean Air Agency may require a source test for any baghouse that has sustained visible emissions, unless such emissions are unavoidable under WAC 173-400-107.

[PSCAA Order of Approval No. 8600, Condition 4]

2.207 Opacity Monitoring.

a. You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7 to 40 CFR 60. The performance test must be conducted while the affected source is in operation.
b. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
c. If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
d. If visible emissions are observed during any Method 22 performance test, of Appendix A-7 to 40 CFR 60, you must conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A-4 to 40 CFR 60. The Method 9 performance test, of Appendix A-4 to 40 CFR 60, must begin within 1 hour of any observation of visible emissions.
e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test, of Appendix A-7 to 40 CFR 60, according to the requirements of Paragraphs a. through d. of this condition for each such conveying system transfer point located within the building, or for the building itself, according to Paragraph g. of this condition.
g. If visible emissions from a building are monitored, the requirements Paragraphs a. through d. of this condition apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
h. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs a. through g., you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(f)(1) & (3)]

2.208 Alternate Monitoring Requirements Approval. You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of 40 CFR 60, Subpart F subject to the provisions of paragraphs a. through f. of this condition.

a. The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
b. If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
c. You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (c)(1) through (c)(3) of this condition:

(1) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
(2) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and
(3) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.

d. The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:
(1) Notice of the information and findings upon which the intended disapproval is based; and
(2) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.

e. You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.

f. The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(o)]

2.209 Development and Submittal (upon request) of Monitoring Plans. If you demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs a. through d. of this. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o) (see Specific Condition **2.207**) and 40 CFR 63.8(f). In your site-specific monitoring plan, you must also address paragraphs a. through c. of this condition.

a. Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 63.8(c)(1), (c)(3), and (c)(4)(ii);
b. Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 63.8(d); and
c. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i). (See also **Attachment 4. 40 CFR 63, Subpart A – General Provisions** of this permit for the general requirements of Subpart A of 40 CFR 63.)

[40 CFR 60.64(b)(3)]
[40 CFR 63.1350(p)(1) & (p)(2))]

2.210 Compliance Test Report Submission. Within 60 days after the date of completing each performance test (see 40 CFR 60.8) as required by 40 CFR 60, Subpart F, you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated

through use of the EPA's Electronic Reporting Tool (ERT) (see https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in 40 CFR 63.13.

[40 CFR 60.64(d)(1)]

2.211 General Duty to Minimize Emissions. At all times you must 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.

[40 CFR 63.1348(d)]

2.212 40 CFR 60, Subpart A - General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 60, Subpart A, see **Attachment 3. 40 CFR 60, Subpart A – General Provisions**.

[WAC 173-401-615]

2.213 40 CFR 63, Subpart A – General Provisions. This emissions unit is also subject to the general provisions of 40 CFR 63, Subpart A, see **Attachment 4. 40 CFR 63, Subpart A – General Provisions.**

[WAC 173-401-615]

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G. Emission Unit #7: Emergency Generator

This emissions unit is a stationary diesel fuel fired reciprocating internal combustion engine (RICE)-driven emergency generator. The generator engine is a Caterpillar Model 3408B used to power a Caterpillar Genset, model SR4, manufactured prior to 1992. The total displacement of the engine is 18 liters (8 cylinders @ 2.25 liters/cylinder), and the power rating is 603 HP (450 kilowatts).

This compression ignition (CI) engine is regulated under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). This permit section addresses an "existing" stationary emergency CI RICE greater than 500 HP with a displacement less than 10 liters per cylinder that is located at an area source of HAP and that commenced construction before 6/12/2006. If the RICE is modified or reconstructed after 7/11/2005, the NSPS 40 CFR 60, Subpart IIII, will then apply. As an emergency engine, electrical power from the attached generator may not be supplied to the grid.

This emissions unit operates only as an emergency engine as defined in NESHAP Subpart ZZZZ and does not operate for purposes of emergency demand response or to regulate voltage or frequency deviation as specified in 40 CFR 63.6640(f)(2)(ii) and (iii).

In addition to the applicable requirements listed in this section, the Emergency Generator is subject to the plant-wide requirements listed in **Section 1: Facility-wide Emission Limits**.

Essential Potential to Emit (PTE) Parameters

2.214 Methods of Operation - (i.e. Fuels). Only ultra-low sulfur diesel fuel oil with a sulfur content of 15 ppm or 0.0015% sulfur by weight or less shall be fired in the emergency diesel internal combustion engine.

[Reg. 1, Section 15.05(a)]
[WAC 173-401-615(1)(c)]

2.215 Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]

b. *Maintenance and Testing*. This RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]

c. *Non-emergency Situations*. This RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph b., above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except that the 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
(3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(4) The power is provided only to the facility itself or to support the local transmission and distribution system.
(5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 CFR 63.6640(f)(4)]

Emission Limitations and Operating Requirements

2.216 Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or within 1 year +30 days of the previous change, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.a.]
b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or within 1 year +30 days of the previous inspection, whichever comes first. [40 CFR 63.6603(a) & Table 2d4.b.]
c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or within 1 year +30 days of the previous inspection, whichever comes first, and replace as necessary. [40 CFR 63.6603(a) & Table 2d4.c.]
d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
f. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph **a**. of this condition above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent of water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent of water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Monitoring of Operations

2.217 Hour Meter. The owner or operator must install, maintain and operate a non-resettable hour meter.

[40 CFR 63.6625(f)]

Compliance Requirements

2.218 Continuous Compliance. This unit shall be in compliance with the operating standards in this section at all times.

[40 CFR 63.6605(a)]

2.219 Operation and Maintenance of Equipment. At all times the owner or operator must 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. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority 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.

[40 CFR 63.6605(b)]

Reporting Requirements

2.220 Delay of Performing Work Practice Requirements. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition **2.223** of this section, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

Recordkeeping Requirements

2.221 Performance and Compliance Records. The owner or operator must keep:

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted. [40 CFR 63.6655(a)(1)]
b. Records of the occurrence and duration of each malfunction of operation. [40 CFR 63.6655(a)(2)]
c. Records of all required maintenance performed on the hour meter. [40 CFR 63.6655(a)(4)]
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **2.226**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
e. Records of the actions required in specific condition **2.223.d.** to show continuous compliance with each emission limitation or operating requirement. [40 CFR 63.6655(d)]
f. Records of the Work or Management Practice Standards specified in Specific Condition **2.223**. [Rule 62-213.440(1)(b)2.a., F.A.C.]
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan. [40 CFR 63.6655(e)]
h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent

for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes. [40 CFR 63.6655(f)]

[WAC 173-401-615(1)(c)]
[40 CFR 63.6655]

2.222 Record Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.10(b)(1)]
[40 CFR 63.6660]

General Provisions

2.223 40 CFR 63 Subpart A, General Provisions. This engine shall comply with the following applicable requirements of 40 CFR 63 Subpart A, General Provisions, which have been adopted by reference in PSCAA Regulation I, Section 3.25 (See Appendix NESHAP Subpart A – General Provisions.)

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (Additional terms defined in §63.6675)
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.6(b)(1)–(4)	Compliance dates for new and reconstructed sources
§63.6(b)(5)	Notification
§63.6(b)(7)	Compliance dates for new and reconstructed area sources that become major sources
§63.6(c)(1)–(2)	Compliance dates for existing sources
§63.6(c)(5)	Compliance dates for existing area sources that become major sources
§ 63.7(a)(3)	CAA section 114 authority
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)–(5)	Initial notifications Except that §63.9(b)(3) is reserved. Except that §63.9(b) only applies as specified in §63.6645.
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation

General Provisions Citation	Subject of Citation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

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Section 3: Standard Terms and Conditions

Duty to Comply

3.1 The Permittee must comply with all conditions of this chapter 401 permit. Any permit noncompliance constitutes a violation of chapter 70A.15 RCW and, for federally enforceable provisions, a violation of the FCAA. Such violations are grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[WAC 173-401-620(2)(a)]

3.2 It shall be unlawful for any person to cause or allow the operation of any source subject to the requirements of WAC 173-401 without complying with the provisions of WAC 173-401 and any permit issued under its authority.

[PSCAA Reg I, Section 7.05]

3.3 All sources and emission units are required to meet the emission standards of WAC 173-400.

[WAC 173-400-040(1)(a)]

Need to Halt or Reduce Activity Not a Defense

3.4 It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

[WAC 173-401-620(2)(b)]

Permit Actions

3.5 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

[WAC 173-401-620(2)(c)]

Property Rights

3.6 This permit does not convey any property rights of any sort, or any exclusive privilege.

[WAC 173-401-620(2)(d)]

Duty to Provide Information

3.7 The Permittee shall furnish to the Puget Sound Clean Air Agency, within a reasonable time, any information that the permitting authority may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the Permittee shall also furnish to the Puget Sound Clean Air Agency copies of records required to be kept by the permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the Puget Sound Clean Air Agency along with a claim of confidentiality. Puget Sound Clean Air Agency shall maintain confidentiality of such information in accordance with RCW 70A.15.2510

[WAC 173-401-620(2)(e)]

[RCW 70A.15.2510]

Permit Fees

3.8 The Permittee shall pay fees as a condition of this permit in accordance with the Puget Sound Clean Air Agency's fee schedule in accordance with Puget Sound Clean Air Agency's Regulation I, Section 7.07. Failure to pay fees in a timely fashion shall subject the Permittee to civil and criminal penalties as prescribed in chapter 70.A15 RCW.

[WAC 173-401-620(2)(f) and PSCAA Regulation I, Section 7.07]
[RCW 70A.15]

Emissions Trading

3.9 No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

[WAC 173-401-620(2)(g)]

Severability

3.10 If any provision of this permit is held to be invalid, all unaffected provisions of the permit shall remain in effect and be enforceable.

[WAC 173-401-620(2)(h)]

Permit Appeals

3.11 This permit or any conditions in it may be appealed only by filing an appeal with the Pollution Control Hearings Board and serving it on the Puget Sound Clean Air Agency within thirty days of receipt pursuant to RCW 43.21B.310. This provision for appeal in this section is separate from and additional to any federal rights to petition and review under §505(b) of the FCAA.

[WAC 173-401-620(2)(i)]

Permit Continuation

3.12 This permit and all terms and conditions contained therein, including any permit shield provided under WAC 173-401-640, shall not expire until the renewal permit has been issued or denied if a timely and complete application has been submitted. An application shield granted pursuant to WAC 173-401-705(2) shall remain in effect until the renewal permit has been issued or denied if a timely and complete application has been submitted.

[WAC 173-401-620(2)(j)]

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Section 4: General Permitting Requirements

Permit Renewal

4.1 The Permittee shall submit a timely and complete Title V permit renewal application to the Puget Sound Clean Air Agency no later than 180 days prior the expiration of this permit.

[WAC 173-401-710(1)]
[WAC 173-401-500(3)(d)]

Expired Permits

4.2 Permit expiration terminates the Permittee's right to operate unless a timely and complete renewal application has been submitted consistent with Specific Condition **4.1** of this permit and WAC 173-401-500. All terms and conditions of the permit shall remain in effect after the permit itself expires if a timely and complete permit application has been submitted.

[WAC 173-401-710(3)]

Revocation of Permits

4.3 The Puget Sound Clean Air Agency may revoke a permit only upon the request of the Permittee or for cause. The Puget Sound Clean Air Agency shall provide at least thirty days written notice to the holder of a current operating permit prior to revocation of the permit or denial of a permit renewal application. Such notice shall include an explanation of the basis for the proposed action and afford the Permittee/applicant an opportunity to meet with the Puget Sound Clean Air Agency prior to the authority's final decision. A revocation issued may be issued conditionally with a future effective date and may specify that the revocation will not take effect if the Permittee satisfies the specified conditions before the effective date. Nothing in this condition shall limit the Puget Sound Clean Air Agency's authority to issue emergency orders.

[WAC 173-401-710(4)]

Reopening for Cause

4.4 This permit shall be reopened and revised under any of the circumstances described in WAC 173-401-730(1). Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

[WAC 173-401-730]

Administrative Permit Amendments

4.5 The Permittee may file for an administrative permit amendment in accordance with WAC 173-401-720(3). The Permittee may implement the changes addressed in the request for an administrative request immediately upon submittal of the request. An “administrative permit amendment” is a permit revision that:

a. Corrects typographical errors;

b. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;

c. Requires more frequent monitoring or reporting by the Permittee;

d. Allows for a change in ownership or operational control of a source where the Puget Sound Clean Air Agency determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage,

and liability between the current and new Permittee has been submitted to the Puget Sound Clean Air Agency;

e. Incorporates into the permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program, provided that such a program meets procedural requirements substantially equivalent to the requirements of WAC 173-401-700, 173-401-725, and 173-401-800 that would be applicable to the change if it were subject to review as a permit modification, and compliance requirements substantially equivalent to those contained in WAC 173-401-600 through 173-401-650.

WAC 173-401-720]

Permit Shield

4.6 The Puget Sound Clean Air Agency shall, upon taking final action granting a request for an administrative permit amendment, allow coverage by the permit shield in WAC 173-401-640 for administrative permit amendments made pursuant to Specific Condition **4.5.e**.

[WAC 173-401-720(4)]

Minor Permit Modifications

4.7 For minor permit modifications the Permittee shall submit an application as described in WAC 173-401-725(2)(b). Minor modification procedures shall be used for those permit modifications that:

a. Do not violate any applicable requirement;

b. Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;

c. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;

d. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid and applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the FCAA and an alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the FCAA; and

e. Are not modifications under any provision of the Title I of the FCAA.

4.8 The permit modification shall be accomplished in accordance with the criteria and procedures as described in WAC 173-401-725(2)(c) through (2)(e).

4.9 For group processing of modifications the Permittee shall submit an application as described in WAC 173-401-725(3)(b). Group processing of minor modifications may be used only for those permit modifications that meet the following criteria:

a. Meets the criteria for minor permit modification procedures in Specific Condition **4.7**; and

b. Collectively are below ten percent of the emissions allowed by the permit for the emissions unit for which the change is requested, twenty percent of the applicable definition of major source in WAC 173-401-200, or five tons per year, whichever is least.

4.10 The permit modification shall be accomplished in accordance with the criteria and procedures as described in WAC 173-401-725(3)(c) through (3)(e).

4.11 The Permittee may make the change(s) proposed in its minor permit modification application immediately after it files such as application provided that those changes requiring the submissions of a notice of construction application have been reviewed and approved by the Puget Sound Clean Air Agency. After the Permittee makes the change allowed by the preceding sentence, and until the permitting authority takes any of the actions specified in WAC 173-401-725(2)(d), the Permittee must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the Permittee need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it.

4.12 The permit shield under WAC 173-401-640 shall not extend to minor permit modifications.

[WAC 173-401-725(2) and (3)]

Significant Permit Modifications

4.13 Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing herein shall be construed to preclude the Permittee from making changes consistent with Chapter 173-401 WAC that would render existing permit compliance terms and conditions irrelevant.

Significant permit modifications shall meet all requirements of WAC 173-401, including those for applications, public participation, review by affected states, and review by EPA, as they apply to permit issuance and permit renewal.

[WAC 173-401-725(4)]
[WAC 173-401-500 (3)(c)]

Changes Not Requiring Permit Revisions

4.14 The Permittee is authorized to make the changes described in WAC 173-401-722 without a permit revision, provided the following conditions are met:

a. The proposed changes are not Title I modifications;

b. The proposed changes do not result in emissions which exceed those allowable under the permit, whether expressed as a rate of emissions, or in total emissions;

c. The proposed changes do not alter permit terms that are necessary to enforce limitations on emissions from the units covered by the permit; and

d. The facility provides the administrator and PSCAA with written notification at least seven days prior to making the proposed changes except that written notification of a change made in response to an emergency shall be provided as soon as possible after the event.

Changes described in WAC 173-401-722 include Section 502(b)(10) changes (changes that contravene an express permit term, but do not included changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements),

PSCAA SIP authorized emission trading, and emission caps. Requirements for notification are included in WAC 173-401-722(2), (3) and (4)

4.15 The permit shield does not apply to any 502(b)(10) change or PSCAA SIP authorized emission trading but does extend to terms and conditions that allow increases or decreases in emissions under changes to emission caps.

4.16 The Permittee shall comply with applicable preconstruction review requirements.

4.17 The Permittee and PSCAA shall attach each notice to their copy of the relevant permit.

[WAC 173-401-722]

Off Permit Changes

4.18 The Permittee is allowed to make changes not specifically addressed or prohibited by the permit terms and conditions without requiring a permit revision, provided that the proposed changes do not weaken the enforceability of existing permit conditions. Any change that is a Title I modification must be submitted as a permit revision. Each change shall meet all applicable requirement and shall not violate any existing permit term or condition.

4.19 The Permittee shall provide contemporaneous written notice to PSCAA and EPA of such change, except for changes that qualify as insignificant under WAC 173-401-530. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.

Mailing addresses for the Agency and EPA are in Specific Conditions **5.7** and **5.8**. The Permittee shall also submit the notice to Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message [facilitysubmittal@pscleanair.gov or any other email address identified by the Agency]. The date the document is received by the Agency e-mail system is considered the submitted date of the report.

4.20 The change shall not qualify for the permit shield.

4.21 The Permittee shall comply with applicable preconstruction review requirements.

4.22 The Permittee shall keep a record describing changes made that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes.

[WAC 173-401-724]

Permit Applications

4.23 Any modified chapter 401 source shall file a complete application to obtain the chapter 401 permit revision within twelve months after commencing operation of the modified source. Where an existing chapter 401 permit would prohibit such construction or change in operation, the modified source must obtain a permit revision before commencing operation. The applicant may elect to integrate procedures for new source review and operating permit issuance. This does not apply to off-permit changes.

[WAC 173-401-500(3)(c)]

4.24 Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information. In addition, an applicant shall provide additional information as necessary to address any requirements that become

applicable to the source after the date it filed a complete application but prior to release of a draft permit.

[WAC 173-401-500(6)]

Notice of Construction

4.25 Except for the exemptions provided in Sections 6.03(b) and (c) of Puget Sound Clean Air Agency's Regulation I, it shall be unlawful for any person to cause or allow the establishment of a new source, or the replacement or substantial alteration of control equipment installed on an existing source, unless a "Notice of Construction application" has been filed and an "Order of Approval" has been issued by the Puget Sound Clean Air Agency. For exemptions included in PSCAA Regulation I, 6.03(c). the Permittee must keep sufficient records to document the applicability of the exemption being relied on.

The exemptions in PSCAA Regulation I, 6.03(b) and (c) do not apply to projects or sources identified in PSCAA Regulation I, 6.03(a)(1) – (5).

[PSCAA Regulation I, Section 6.03(a) & (c)]
[PSCAA Regulation I, Section 6.01(a)]
[WAC 173-400-114]
[40 CFR60.7(a)(4)]

4.26 Where work for which an Order of Approval is required is commenced or performed prior to making application and receiving approval, the Control Officer may conduct an investigation as part of the Notice of Construction review. In such a case, an investigation fee, in addition to the fees of Section 6.04, shall be assessed in an amount equal to 3 times the fees of Section 6.04. Payment of the fees does not relieve any person from the requirement to comply with the regulations nor from any penalties for failure to comply.

[PSCAA Regulation I, Section 6.10]

New Source Notification

4.27 Except for projects or sources identified in PSCAA Regulation I, 6.03(a)(1) – (5), a Notice of Construction application and Order of Approval are not required for the new sources identified in PSCAA's Regulation I, Section 6.03(b), provided that a complete notification is filed with the PSCAA.

[PSCAA Regulation I, Section 6.03(b)(1)-(9) and (11)]
[PSCAA Regulation I, Section 6.03(b)(10)]

Prevention of Significant Deterioration (PSD)

4.28 For a new major source stationary source or a major modification to an existing major stationary source as defined in WAC 173-400-720, the Permittee must comply with the requirements in WAC 173-400-700 through 750. Ecology is the permitting agency for the PSD program in WAC 173-400-700 through -750.

[PSCAA Regulation I, Section 6.01]

Notice of Completion

4.29 Within 30 days of completion of the installation or modification of a stationary source subject to Specific Condition **4.24** of this section, the Permittee shall file a Notice of Completion with PSCAA. Each Notice of Completion shall be submitted on a form provided by the PSCAA and

shall specify the date upon which operation of the stationary source has commenced or will commence.

[PSCAA Regulation I, Section 6.09]

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Section 5: General Compliance Requirements

Schedule of Compliance

5.1 For applicable requirements with which the source is in compliance, the Permittee will continue to comply with such requirements.

For applicable requirements that will become effective during the permit term, the Permittee shall meet such requirements on a timely basis.

[WAC 173-401-630(3)]
[WAC 173-401-510(2)(h)(iii)]

Responsible Official Certification

5.2 Except as provided for in Condition **5.6**, Certification Upon Submittal, any application form, report, or compliance certification submitted pursuant to this permit shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required by a responsible official under this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[WAC 173-401-520]
[WAC 173-401-630(1)]

Compliance Certification

5.3 The Permittee shall submit a certification of compliance with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The certification of compliance shall be submitted to the Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message addressed to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency) by February 28th of each calendar year for the previous calendar year. The date the document is received by the Agency e-mail system is considered the submitted date of the report. An email message to the Agency with a link to a file-sharing or folder-sharing site requiring a document download by the Agency will not meet the requirement in this section. The Permittee shall also submit the compliance certification to EPA Region 10 as specified in Specific Condition **5.7** by February 28th of each calendar year for the previous calendar year.

Each certification shall include the following:

a. The identification of each term or condition of the permit that is the basis of the certification;

b. The compliance status;

c. Whether compliance was continuous or intermittent; and

d. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with WAC 173-401-615(3)(a).

As directed in Specific Condition **5.8** the Permittee shall submit the compliance certification to Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency) by February 28 for the previous year (January – December). The date the document is received by the Agency e-mail system is considered the submitted date of the report.

Where an applicable requirement requires reporting more frequently than once every six months, the responsible official's certification need only to be submitted once every six months, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents subject to the certification. The certification of compliance shall be submitted to the Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message addressed to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency).

The semiannual certifications shall cover the calendar months of January through June and July through December.

[WAC 173-401-630(5)]
[PSCAA Regulation I, Section 7.09(c)]

Semiannual Report

5.4 The Permittee shall submit the reports of any required reportable monitoring at least once every six months. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with WAC 173-401-520. The report periods and submittal due dates are as shown below.

a. Reporting period covering January 1 – June 30. Report submittal due date is July 30.

b. Reporting period covering July 1 – December 31. Report submittal due date is January 30.

The Permittee shall submit all semiannual reports to Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency. The date the document is received by the Agency e-mail system is considered the submitted date of the report.

[WAC 173-401-615(3)(a)]
[PSCAA Regulation I, Section 7.09(c)]

Deviation Report

5.5 The Permittee shall promptly report all deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken.

a. For deviations which represent a potential threat to human health or safety, "prompt" means as soon as possible. The Permittee shall report these deviations by e-mail to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency) as soon as possible but in no case later than twelve hours after the deviation is discovered. The date and time the document is received by the Agency e-mail system is considered the submitted date of the report.

b. All other deviations shall be reported by email no later than thirty days after the end of the month during which the deviation is discovered. The report must be submitted to the Agency in electronic format as an attachment to an e-mail message to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency). The date the document is received by the Agency e-mail system is considered the submitted date of the report.

The Permittee shall maintain a contemporaneous record of all deviations.

A Deviation Report may be certified by a responsible official at the time of submittal as provided in Specific Condition **5.2** (Responsible Official Certification); however it is not required to be

certified at the time of submittal. Any Deviation Report not certified at the time of submittal must be certified in the Semiannual report as per Specific Condition **5.6** (Certification upon Submittal).

[WAC 173-401-615(3)(b)]
[PSCAA Regulation I, Section 7.09(c)]

Certification upon Submittal

5.6 For the purpose of this permit, the following application forms, reports, and compliance certifications must be certified by the responsible official upon submittal:

- Annual Air Operating Permit Compliance Certification (WAC 173-401-630(5))
- Semiannual Air Operating Permit Report (WAC 173-401-615(3)(a))
- Administrative Permit Amendment Requests (WAC 173-401-720)
- Permit Modification Application (WAC 173-401-725)
- Renewal of Permit (WAC 173-401-710) (WAC 173-401-500(4))

For all other application forms, reports, and compliance certifications, the responsible official's certification needs only to be submitted once every six months in the semiannual report, covering all required reporting since the date of the last certification, provided that the certification specifically identifies all documents.

[PSCAA Regulation I, Section 7.09(c)]
[WAC 173-401-630(5)]
[WAC 173-401-615(3)(a)]

US EPA Mailing Address

5.7 For all compliance certifications, test reports and monitoring reports required to be submitted to the US Environmental Protection Agency, a hard copy must be sent to the Clean Air Act Compliance Manager at the address below unless the document is required by regulation to be submitted via a Cross-Media Electronic Reporting Regulation (CROMERR) compliant system. If the document(s) must be submitted via CROMERR, it must be submitted electronically via the Compliance and Emissions Data Reporting Interface (CEDRI) section of the Central Data Exchange (CDX).

Clean Air Act Compliance Manager
US EPA Region 10, Mail Stop: 20-C04
1200 Sixth Avenue, Suite 155
Seattle, Washington 98101

Compliance Reports-Electronic Submittal

5.8 The Permittee shall submit complete copies of all required compliance reports to Puget Sound Clean Air Agency in electronic format as an attachment to an e-mail message to facilitysubmittal@pscleanair.gov (or any other email address identified by the Agency). The date the document is received by the Agency e-mail system shall be considered the submitted date of the report. Nothing in this condition waives or modifies any requirements established under other applicable regulations.

[PSCAA Regulation I, Section 7.09(c)]

Data Recovery

5.9 The Permittee shall recover valid monitoring and recordkeeping data for each parameter according to any specific monitoring and recordkeeping requirements identified in Section 2 of this permit. If the specific monitoring and recordkeeping requirements in Section 2 of this permit do not address data recovery provisions, then the required data recovery is assumed to be 100% except as described in this section. However, no data need be collected during any period that the monitored process does not operate.

The Deviation Reports required by Specific Condition **5.5** shall include an explanation for any instance in which the Permittee failed to meet the data recovery requirements of this condition for any monitored process or parameter and any instances of reconstructing lost data. The explanation shall include the reason that the data was not collected and any actions that the Permittee will take to ensure collection of such data in the future.

[WAC 173-401-615(1)(b)]

Inspection and Entry

5.10 Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the permitting authority or an authorized representative to perform the following:

a. Enter upon the Permittee's premises where a Title V source is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and

d. As authorized by WAC 173-400-105 and the FCAA, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

[WAC 173-401-630(2)]
[PSCAA Regulation I, Section 3.05(b)]
[WAC 173-400-105(3)]

Investigations and Testing

5.11 For the purpose of determining compliance with an emission standard, the Puget Sound Clean Air Agency or Ecology shall have the authority to conduct testing of a source or to order the Permittee to have it tested and to report the results to the Agency or Ecology. In the event the Agency or Ecology conducts the test, the Agency or Ecology shall provide the Permittee an opportunity to observe the sampling and to obtain a sample at the same time. Testing shall follow the requirements in Specific Conditions **5.28** to **5.30** of this permit. If testing is to show compliance with New Source Performance Standards, testing shall follow the requirements in Specific Conditions **5.28** to **5.30** of this permit as well as 40 CFR 60.11 Subpart A and all requirements for testing under the applicable Subpart(s).

[PSCAA Regulation I, Section 3.05(b)]
[WAC 173-400-105(2)]
[WAC 173-400-105(4)]

Credible Evidence

5.12 For the purpose of establishing whether or not a person has violated or is in violation of any provision of chapter 70.94 RCW, any rule enacted pursuant to that chapter, or any permit or order issued thereunder, nothing in this regulation shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test procedures or methods had been performed.

[PSCAA Regulation I, Section 3.06]
[RCW 70A.15]
[40 CFR 60.11(g)]
[PSCAA Regulation I, Section 3.25]

Excess Emissions

This section is in effect until the effective date of EPA's removal of the September 20, 1993, version of this section from the SIP. This section is not effective starting on that date.

5.13 The Permittee shall have the burden of proving to Puget Sound Clean Air Agency in an enforcement action that excess emissions were unavoidable. Excess emissions which represent a potential threat to human health or safety or which the Permittee believes to be unavoidable shall be reported to Puget Sound Clean Air Agency as soon as possible. Other excess emissions shall be reported within thirty days after the end of the month during which the event occurred or as part of the routine emission monitoring reports. Upon request by Puget Sound Clean Air Agency, the Permittee shall submit a full written report including the known causes, the corrective actions taken, and the preventive measures to be taken to minimize or eliminate the chance of recurrence.

[WAC 173-400-107(1) & (3)]

5.14 Excess emissions determined to be unavoidable under Specific Conditions **5.15**, **5.16** or **5.17** of this permit shall be excused and not subject to penalty.

[WAC 173-400-107(2)]

5.15 Excess emissions due to startup or shutdown conditions shall be considered unavoidable provided the Permittee reports as required under Specific Condition **5.13** of this permit and adequately demonstrates that the excess emissions could not have been prevented through careful planning and design and if a bypass of control equipment occurs, that such bypass is necessary to prevent loss of life, personal injury, or severe property damage.

[WAC 173-400-107(4)]

5.16 Excess emissions due to scheduled maintenance shall be considered unavoidable if the Permittee reports as required under Specific Condition **5.13** of this permit and adequately demonstrates that the excess emissions could not have been avoided through reasonable design, better scheduling for maintenance or through better operation and maintenance practices.

[WAC 173-400-107(5)]

5.17 Excess emissions due to upsets shall be considered unavoidable provided the Permittee reports as required under Specific Condition **5.13** of this permit and adequately demonstrates that:

a. The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

b. The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance; and

c. The operator took immediate and appropriate corrective action in a manner consistent with good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action, including slowing or shutting down the emission unit as necessary to minimize emissions, when the operator knew or should have known that an emission standard or permit condition was being exceeded.

[WAC 173-400-107(6)]
40 CFR 60.11(d)

Excess Emissions Reporting

*This section takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the SIP. Until that occurs this section is "State Only" as shown in Specific Condition **5.31**,Tables 9 and/or 10.*

5.18 Notify the permitting authority:

a. When excess emissions represent a potential threat to human health or safety, the owner or operator must notify the permitting authority by phone or electronic means as soon as possible, but not later than twelve hours after the excess emissions were discovered.

b. For all other excess emissions, the owner or operator must notify the permitting authority in a report as provided in Specific Condition **5.19**.

[WAC 173-400-108(1)]

5.19 Report. The owner or operator must report all excess emissions to the permitting authority:

a. To claim emissions as unavoidable under WAC 173-400-109, the report must contain the information in Specific Condition **5.20**.

b. As provided in Specific Conditions **5.5** and **5.20**.

[WAC 173-400-108(2)]

5.20 For an excess emission event that the owner or operator claims was unavoidable under WAC 173-400-109, the report must include the following information:

a. Properly signed contemporaneous records or other relevant evidence documenting the owner or operator's actions in response to the excess emissions event.

b. Information on whether installed emission monitoring and pollution control systems were operating at the time of the exceedance. If either or both systems were not operating, information on the cause and duration of the outage; and

c. All additional information required under Specific Condition **5.25** supporting the claim that the excess emissions were unavoidable.

[WAC 173-400-108(4)]

Unavoidable Excess Emissions

*This section takes effect on the effective date of EPA's removal of the September 20, 1993, version of WAC 173-400-107 from the PSCAA SIP. Until that occurs this section is "State Only" as shown in Specific Condition **5.31**,Tables 9 and/or 10.*

5.21 Excess emissions determined to be unavoidable under the procedures and criteria in this section are violations of the applicable statute, rule, permit, or regulatory order.

a. The permitting authority determines whether excess emissions are unavoidable based on the information supplied by the source and the criteria in Specific Condition **5.25**.

b. Excess emissions determined by the permitting authority to be unavoidable are:

i. A violation subject to WAC 173-400-230(3), (4), and (6); but

ii. Not subject to civil penalty under WAC 173-400-230(2).

[WAC 173-400-109(1)]

5.22 The owner or operator of a source shall have the burden of proving to the permitting authority in an enforcement action that excess emissions were unavoidable. This demonstration shall be a condition to obtaining relief under Specific Condition **5.25**.

[WAC 173-400-109(2)]

5.23 Specific Condition **5.21** does not apply to an exceedance of an emission standard in 40 CFR Parts 60, 61, 62, 63, and 72, or a permitting authority's adoption by reference of these federal standards.

[WAC 173-400-109(3)]

5.24 Excess emissions that occur due to an upset or malfunction during a startup or shutdown event are treated as an upset or malfunction under Specific Condition **5.25**.

[WAC 173-400-109(4)]

5.25 Excess emissions due to an upset or malfunction will be considered unavoidable provided the source reports as required by Specific Condition **5.19** and adequately demonstrates to the permitting authority that:

a. The event was not caused by poor or inadequate design, operation, maintenance, or any other reasonably preventable condition;

b. The event was not of a recurring pattern indicative of inadequate design, operation, or maintenance;

c. When the operator knew or should have known that an emission standard or other permit condition was being exceeded, the operator took immediate and appropriate corrective action in a manner consistent with safety and good air pollution control practice for minimizing emissions during the event, taking into account the total emissions impact of the corrective action. Actions taken could include slowing or shutting down the emission unit as necessary to minimize emissions;

d. If the emitting equipment could not be shut down during the malfunction or upset to prevent the loss of life, prevent personal injury or severe property damage, or to minimize overall emissions, repairs were made in an expeditious fashion;

e. All emission monitoring systems and pollution control systems were kept operating to the extent possible unless their shutdown was necessary to prevent loss of life, personal injury, or severe property damage;

f. The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent possible; and

g. All practicable steps were taken to minimize the impact of the excess emissions on ambient air quality.

[WAC 173-400-109(5)]

Permit Shield

5.26 Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided such applicable requirements are included and are specifically identified in this permit. The permit shield does not apply to any insignificant emissions unit or activity so designated under WAC 173-401-530.

[WAC 173-401-640(1)]
[WAC 173-401-530(3)]

Permit Shield Exclusions

5.27 Nothing in WAC 173-401-640 or in this permit shall alter or affect the following:

a. The provisions of Section 303 of the FCAA (emergency orders), including the authority of the administrator under that section;

b. The liability of the Permittee for any violation of applicable requirements prior to or at the time of permit issuance;

c. The applicable requirements of the acid rain program, consistent with section 408(a) of the FCAA;

d. The ability of EPA to obtain information from a source pursuant to section 114 of the FCAA; or

e. The ability of the Puget Sound Clean Air Agency to establish or revise requirements for the use of reasonably available control technology (RACT) as provided in chapter 252, Laws of 1993.

[WAC 173-401-640(4)]

Compliance Test Methods

5.28 Testing of sources for compliance with emission standards shall be performed in accordance with current U.S. Environmental Protection Agency approved methods unless specific methods have been identified in this permit.

[PSCAA Regulation I, Section 3.07(a)]

Compliance Test Notification

5.29 The Permittee shall notify the Puget Sound Clean Air Agency in writing at least 21 days prior to any compliance test. Notification of a compliance test shall be submitted on forms provided by the Agency. Test notifications using the Agency forms do not constitute test plans. Compliance with this notification provision does not satisfy any obligation found in an order or other regulatory requirement to submit a test plan for Agency review. This notification requirement does not waive or modify test notification requirements found in other applicable regulations.

[PSCAA Regulation I, Section 3.07(b)]

Compliance Test Report Submittal

5.30 For any required compliance test, the Permittee shall submit the compliance test report to the Puget Sound Clean Air Agency no later than 60 days after the test. The report shall include:

a. A description of the source and the sampling location;

b. The time and date of the test;

c. A summary of results, reported in units and for averaging periods consistent with the applicable emission standard;

d. A description of the test methods and quality assurance procedures employed;

e. The amount of fuel burned or raw material processed by the source during the test;

f. The operating parameters of the source and control equipment during the test;

g. Field data and example calculations; and

h. A statement signed by the senior management official of the testing firm certifying the validity of the source test report.

[PSCAA Regulation I, Section 3.07(c)]

Federal Enforceability

5.31 All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, are enforceable by the US EPA and citizens under the FCAA, except for those requirements designated as "State Only" in the tables below.

[WAC 173-401-625]

Note: In some cases, there are two effective dates for the same state and local regulations. One of the dates reflects the "federally enforceable" regulation that has been approved by the EPA and is part of the current federally-approved, state implementation plan (SIP). A more current version of the regulation may have been adopted by the Agency, but was either not submitted to EPA for approval into the SIP, or it has been submitted and EPA has not approved it yet. The tables below list state and local regulations that apply to the Permittee. There are additional requirements in the WAC that may apply to other air operating permit sources, but do not apply to this Permittee based on the information submitted by the Permittee in their application. These rules are not included in these tables. The "Rule Description" column includes the effective date of the version of the regulation that is approved in the SIP. This version of the rule is identified as "Federally Enforceable" in the third column of the table. The version of a rule that is not currently approved in the SIP is identified as "State Only." If and when EPA approves a new version of the regulation into the SIP, the old version of the regulation will be replaced and superseded by the new version automatically. These tables do not include the federally enforceable requirements of the SIP that are incorporated by reference into the Agency's Regulation I, Section 6.01. The entirety of Regulation I, Section 6.01.applies to the Permittee.

Table 9. WAC Requirements and PSCAA State Implementation Plan Status

Washington Administrative Code (WAC)		
Regulation	**Rule Description (Effective Date)**	**Federal Enforceability**
WAC 173-400-020	Applicability of WAC 173-400 (12/19/12)	Federally Enforceable
WAC 173-400-030	Definitions	Federally Enforceable
WAC 173-400-040	General Standards for Maximum Emissions (9/16/18)	Federally Enforceable, sections (1)(a) & (b); (4); and (9)(b) only

Washington Administrative Code (WAC)		
Regulation	**Rule Description (Effective Date)**	**Federal Enforceability**
WAC 173-400-040	General Standards for Maximum Emissions (916/18)	State Only, not in SIP, sections (3) and (5)
WAC 173-400-070	Emission Standards for Certain Source Categories (3/22/91	Federally Enforceable, Except (7)
WAC 173-400-081	Startup and shutdown (4/1/11)	Federally Enforceable
WAC 173-400-091	Voluntary Limits on Emissions (9/20/93)	Federally Enforceable with respect to Section 112 hazardous air pollutants
WAC 173-400-091	Voluntary Limits on Emissions (4/1/11)	Federally Enforceable
WAC 173-400-105	Records, monitoring, and reporting (11/25/18)	Federally Enforceable, except for section 173-400-105(7)
WAC 173-400-107	Excess Emissions (9/20/93)	Federally Enforceable
WAC 173-400-107	Excess Emissions (9/16/18)	State Only, not in SIP
WAC 173-400-108	Excess Emissions Reporting (9/16/18)	State Only, not in SIP
WAC 173-400-109	Unavoidable Excess Emissions (9/16/18)	State Only, not in SIP
WAC 173-400-110	New Source Review (NSR) (12/29/12)	Federally Enforceable, sections (1)(c)(i) & (1)(d) only
WAC 173-400-111	Processing Notice of Construction Applications for Sources, Stationary Sources and Portable Sources	Federally Enforceable Except: 173-400-111(3)(h);—The part of 173-400-111(8)(a)(v) that says, “and 173-460-040,”; 173-400-111(9).
WAC 173-400-113	Requirements for New Sources in Attainment or Unclassified Areas (12/29/12)	Federally enforceable, except section (3), second sentence
WAC 173-400-114	Replacement or substantial alteration of emission control technology (12/29/12)	State Only, not in SIP
WAC 173-400-151	Retrofit Requirements for Visibility Protection	Federally Enforceable
WAC 173-400-161	Compliance Schedules	Federally Enforceable
WAC 173-400-171	Public notice and Opportunity for Public Comment (7/1/16)	Federally Enforceable, except the part of section (3)(b) that says, “or any increase in emission of a toxic air pollutant above the acceptable source impact level for that toxic air pollutant as regulated under chapter 173-460 WAC”. 173-400-171(12)
WAC 173-400-200	Creditable stack height and dispersion techniques (2/10/05)	Federally Enforceable
WAC 173-400-205	Adjustment for Atmospheric Conditions (3/22/91)	Federally Enforceable
WAC 173-441	Reporting of Emissions of Greenhouse Gases (various dates)	State Only, not in SIP

Washington Administrative Code (WAC)		
Regulation	**Rule Description (Effective Date)**	**Federal Enforceability**
RCW 70A.60 , recodified from 70.94.970 in 2020 and again in 2021	Hydrofluorocarbons – Emissions Reductions	State Only, not in SIP

Table 10. PSCAA Requirements and PSCAA State Implementation Plan Status

Puget Sound Clean Air Agency Regulation		
Regulation	**Rule Description**	**Federally Enforceability**
Regulation I: Section 3.04	Reasonably Available Control Technology (7/1/12)	Federally Enforceable, except (e)
Regulation I: Section 3.05	Investigations by the Control Officer (3/17/94)	State Only, not in SIP
Regulation I: Section 3.06	Credible Evidence (11/14/98)	Federally Enforceable
Regulation I: Section 3.07	Compliance Tests (5/1/06)	State Only, not in SIP
Regulation I: Section 3.23	Alternative Means of Compliance (11/1/96)	State Only, not in SIP
Regulation I: Section 3.25	Federal Regulation Reference Date	Federally Enforceable
Regulation I: Section 6.01	Components of New Source Review Program (8/1/18)	Federally Enforceable, except the parenthetical in 6.01(b) which states "as delegated by agreement with the US Environmental Protection Agency, Region 10."
Regulation I: Section 6.03	New Source Review (11/1/15)	Federally Enforceable, except section (b)(10)
Regulation I: Section 6.09	Notice of Completion (5/1/04)	Federally Enforceable
Regulation I: Section 6.10	Work Done without an Approval (9/1/01)	Federally Enforceable
Regulation I: Section 7.09	General Reporting Requirements for Operating Permits (10/26/23)	Federally Enforceable, excluding toxic air pollutants
Regulation I: Section 8.04	General Conditions for Outdoor Burning (1/1/01)	Federally Enforceable
Regulation I: Section 8.04	General Conditions for Outdoor Burning (11/1/08)	State Only, not in SIP
Regulation I: Section 8.07	Fire Extinguisher Training (11/1/99)	State Only, not in SIP
Regulation I: Section 9.03	Visual Standard (5/1/04)	Federally Enforceable, except (e)
Regulation I: Section 9.04	Opacity Standards for Equipment with COM (5/1/04)	Federally Enforceable, except (d)(2) & (f)
Regulation I: Section 9.05	Refuse Burning (1/13/94)	Federally Enforceable
Regulation I: Section 9.07	Sulfur Dioxide Emission Standard (5/19/94)	Federally Enforceable
Regulation I: Section 9.08	Fuel Oil Standards (5/1/04)	Federally Enforceable, only as it applies to the regulation of criteria pollutants

Puget Sound Clean Air Agency Regulation		
Regulation	**Rule Description**	**Federally Enforceability**
Regulation I: Section 9.09	Particulate Matter Emission Standards (6/1/98)	Federally Enforceable
Regulation I: Section 9.10	Emission of HCl (6/9/88)	State Only, not in SIP
Regulation I: Section 9.11(a)	Detriment to Person or Property (4/17/99)	Federally Enforceable
Regulation I: Section 9.13	Concealment and Masking Restricted (6/9/88)	Federally Enforceable
Regulation I: Section 9.15	Fugitive Dust Control Measures (4/17/99)	Federally Enforceable
Regulation I: Section 9.16	Spray Coating Operations (12/2/10)	Federally Enforceable
Regulation I: Section 9.18	Crushing Operations (3/2/12)	Federally Enforceable
Regulation I: Section 9.20	Maintenance of Equipment (6/9/88)	Federally Enforceable
Regulation I: Section 15	Nonroad Engines (2/1/12)	State Only, not in SIP
Regulation II, Section 1.04	General Definitions (12/11/80)	Federally Enforceable
Regulation II, Section 1.05	Specialty Definitions (9/1/03)	Federally Enforceable
Regulation II, Section 3.04	Motor Vehicle and Mobile Equipment Coating Operations (9/1/03)	Federally Enforceable
Regulation III: Section 1.11	Reporting Requirements	State Only, not in SIP
Regulation III: Section 2.02	National Emission Standards for Hazardous Air Pollutants (04/23/15)	State Only, not in SIP
Regulation III. Section 4.01	Asbestos Definitions (3/26/09)	State Only, not in SIP
Regulation III: Section 4.02	Asbestos Survey Requirements (7/31/95)	State Only, not in SIP
Regulation III: Section 4.03	Asbestos Notification Requirements (7/1/11)	State Only, not in SIP
Regulation III: Section 4.04	Asbestos Removal Requirements (9/1/00)	State Only, not in SIP
Regulation III: Section 4.05	Procedures for Asbestos Project (4/3/03)	State Only, not in SIP
Regulation III: Section 4.07	Disposal of Asbestos Material (7/31/95)	State Only, not in SIP

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Section 6: General Applicable Requirements

Definitions

6.1 Unless otherwise defined in this permit, the terms used in this permit shall have the same meaning ascribed to them in the referenced regulation.

[WAC 173-401-200]

General Recordkeeping Requirements

6.2 The Permittee shall keep records of required monitoring and testing information that include the following:

(i) The date, place as defined in the permit, and time of sampling or measurements;
(ii) The date(s) analyses were performed;
(iii) The company or entity that performed the analyses;
(iv) The analytical techniques or methods used;
(v) The results of such analyses; and
(vi) The operating conditions existing at the time of sampling or measurement.

[WAC 173-401-615(2)(a)]

6.3 Upon notification by the Agency, the Permittee shall maintain records on the type and quantity of emissions from the source and other information deemed necessary by the Agency to determine whether the source is subject to rules and regulations and whether the source is in compliance with applicable emissions limitations and control measures.

The Permittee must keep a record describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes.

[WAC 173-400-105]
[WAC 173-401-615(2)(b)]

Retention of Records

6.4 Except for records required to comply with the Washington state program for reporting of emissions of greenhouse gases (GHG), see Specific Condition **6.21** of this permit, the Permittee shall retain records of all required monitoring data and support information for a period of five years from the date of the monitoring sample, measurement, report, or application. Records required to comply with Specific Condition **6.21** of this permit shall be retained by the Permittee for ten years. In addition to the support information for all monitoring samples, measurements, reports and applications, support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[WAC 173-401-615(2)(c)]
[WAC 173-401-615(1)(b)]

Asbestos

6.5 The Permittee shall comply with 40 CFR Sections 61.145, 61.148 and 61.150 when conducting any renovation or demolition at the facility.

[40 CFR 61.145 and 150]
[PSCAA Regulation I, Section 3.25]

6.6 The Permittee shall comply with Puget Sound Clean Air Agency Regulation III, Article 4 when conducting any asbestos project, renovation or demolition activities at the facility.

[PSCAA Regulation III, Article 4]

Open Burning

6.7 It shall be unlawful for any person to cause or allow any outdoor burning unless the burning is in compliance with WAC 173-425.

[PSCAA Regulation I, Section 8.04, dated 1/1/01]
[PSCAA Regulation I, Section 8.04, dated 11/1/08]

6.8 No person shall conduct outdoor burning during an air pollution episode or a declared period of impaired air quality.

[WAC 173-425-050(3)]

6.9 Hand-held fire extinguishers training shall be conducted in accordance with PSCAA's Regulation I, Section 8.07.

[PSCAA Regulation I, Section 8.07]

Stratospheric Ozone and Climate Protection

6.10 The Permittee shall comply with the following standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156;

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158;

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

6.11 The Permittee may switch from any ozone-depleting substance to any alternative approved pursuant to the Significant New Alternatives Program (SNAP), 40 CFR Part 82, Subpart G, without a permit revision but shall not switch to a substitute listed as unacceptable pursuant to such program.

[40 CFR 82.174]

6.12 Any certified technician employed by the Permittee shall keep a copy of their certification at their place of employment.

[40 CFR 82.166(1)

6.13 The Permittee shall not willfully release any regulated refrigerant and shall use refrigerant extraction equipment to recover regulated refrigerant when servicing, repairing or disposing of commercial air conditioning, heating, or refrigeration systems.

[RCW 70.94.970(1) and (3)]

Concealment or Masking

6.14 It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means which, without resulting in a reduction in the total amount of air contaminant emitted, conceals an emission of air contaminant which would otherwise violate this article.

[PSCAA Regulation I, Section 9.13(a)]

6.15 It shall be unlawful for any person to cause or allow the installation or use of any device or use of any means designed to mask the emission of an air contaminant which causes detriment to health, safety or welfare of any person.

[PSCAA Regulation I, Section 9.13(b)]

False Statement

6.16 No person shall make any false material statement, representation or certification in any form, notice or report required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit or order in force pursuant thereto.

[WAC 173-400-105(6)]
[RCW 70A.15 and 70A.25]

Tampering

6.17 No person shall render inaccurate any monitoring device or method required under chapter 70.94 or 70.120 RCW, or any ordinance, resolution, regulation, permit, or order in force pursuant thereto.

[WAC 173-400-105(8)]
[RCW 70A.15 and 70A.25]

Adjustment for Atmospheric Conditions

6.18 The Permittee shall not vary the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant except as directed according to air pollution episode regulations.

[WAC 173-400-205]

Reasonably Available Control Technology (RACT)

6.19 Emission standards and other requirements contained in rules or regulatory orders in effect at the time of operating permit issuance or renewal shall be considered RACT for purposes of permit issuance or renewal.

[WAC 173-401-605(3)]

Annual Emission Report

6.20 The Permittee shall report annually to the Puget Sound Clean Air Agency listing those air contaminants emitted during the previous calendar year that equal or exceed the following in tons per year:

Contaminant/Pollutant	Reporting Threshold (tons/year)
Carbon monoxide (CO)	25
Facility combined total of all toxic air contaminants (TAC)	6
Any single toxic air contaminant (TAC)	2

Contaminant/Pollutant	Reporting Threshold (tons/year)
Nitrogen oxide (NO_X)	25
Particulate matter (PM_{10})	25
Particulate matter ($PM_{2.5}$)	25
Sulfur oxide (SO_X)	25
Volatile organic compounds (VOC)	25
Lead	0.5

Annual emission rates shall be reported to the nearest whole ton per year for only those air contaminants that equal or exceed the thresholds above, except lead which must be reported to the nearest tenth of a ton. The Permittee shall maintain records of information necessary to document any reported emissions or demonstrate that the emissions were less than the above amounts. The Permittee shall submit to the Puget Sound Clean Air Agency any additional information required by WAC 173-400-105(1) and Puget Sound Clean Air Agency Regulation III, Section 1.11.

The Permittee shall report to the Agency the amount of each toxic air contaminant listed in WAC 173-460-150 that the facility emitted during the previous calendar year even if the emissions are below the reporting thresholds in the table above. The report shall also include all information needed to calculate these emissions.

The Permittee shall, upon request of the Agency, provide such existing or reasonably available information as necessary to assist the Agency to determine if the emissions of toxic air contaminants from the source may result in the exceedance of an ASIL contained in WAC 173-460-150.

[Puget Sound Clean Air Agency Regulation I, Section 7.09(a)]
[WAC 173-400-105(1)]
[Puget Sound Clean Air Agency Regulation III, Section 1.11 (a),(b) & (c)]

Washington State Program for Reporting of Emissions of Greenhouse Gases

6.21 a. If the facility covered by this permit emits 10,000 metric tons of CO2e (carbon dioxide equivalents) or more per calendar year from this facility, as calculated according to WAC 173-441-030(1)(b), GHG reporting is mandatory. The Permittee may voluntarily choose to report to the Washington State Department of Ecology but must use the methods established in WAC 173-441-120(3) and WAC 173-441-122(1)(c) to calculate any voluntary reported GHG emissions. Once the Permittee is subject to the reporting requirement, the Permittee must continue for each year thereafter to comply with all requirements of WAC 173-441, including the requirement to submit annual GHG reports, even if the facility covered by this permit does not meet the applicability requirements in WAC 173-441-030(1) or (2), except as provided in WAC 173-441-030(6)(a)-(c). Reports with a compliance obligation under Chapter 70A.65 RCW, as described in WAC 173-446, must continue to report for any year with a compliance obligation.

[WAC 173-441-030(1), (5) and (6), 3/12/22]

b. For GHG reporting, the Permittee shall follow the procedures for emission calculation, monitoring, quality assurance, missing data, recordkeeping, and reporting that are specified in each relevant section of WAC 173-441. The annual GHG report shall contain the information required by WAC 173-441-050(3) and (4) and be submitted to the Washington State Department of Ecology following the schedule in WAC 173-441-050(2). For required reporting, the Permittee must retain all required records as specified in WAC 173-441-050(6) for at least 10 years from the date of submission of the annual GHG report for the reporting year in which the record was generated in a form that is suitable for expeditious inspection and review in accordance with WAC 173-441-050(6).

[WAC 173-441-050, 3/12/22]

c. For GHG reporting, each submission shall be signed by a representative designated in accordance with WAC 173-441-060 and include the signed certification statement in WAC 173-441-060(5)(a). Each GHG report and certification must be submitted electronically in accordance with the requirements in WAC 173-4410050 and 173-441-060 and in a format specified by the Washington State Department of Ecology.

[WAC 173-441-060 and -070, 3/12/22]

d. All requests, notification, and communication to the Washington State Department of Ecology pursuant to WAC 173-441, must be submitted in a format as specified by Ecology to either of the following;

- For U.S. mail: Greenhouse Gas Reporting, Air Quality Program, Department of Ecology, PO Box 47600, Olympia, WA 98504-7600.
- For email: ghgreporting@ecy.wa.gov

[WAC 173-441-100, 3/12/22]

Non-road Engines

6.22 The Permittee shall file a Notice of Intent to Operate for non-road engine(s) that are subject to the requirements of Puget Sound Clean Air Agency Regulation I, Article 15.

a. For nonroad engine with cumulative maximum rated brake horsepower > 2000 BHP, the notification of intent to operate and approval is required before operations begin.

b. For nonroad engine with cumulative maximum rated brake horsepower > 500 and ≤ 2000 BHP, the notification of intent to operate is required before operations begin.

[PSCAA Regulation I, Section 15.03 (b)(1) & (c)(1)]

6.23 The Permittee must record the following information for each nonroad engine:

a. Site address or location;

b. Date of equipment arrival at the site;

c. Date of equipment departure from the site;

d. Engine function or purpose;

e. Identification of each component as follows:

i. Equipment manufacturer, model number and its unique serial number;

ii. Engine model year;

iii. Type of fuel used with fuel specifications (sulfur content, cetane number, etc.).

The Permittee must keep the records of the current engine and equipment activity in hard copy or electronic form. These records can be maintained on-site or off-site for at least five years and must be readily available to the Puget Sound Clean Air Agency on request.

[PSCAA Regulation I, Section 15.03(b)(2), (b)(3) & (c)(3)]

6.24 All nonroad engines must use ultra-low sulfur diesel or ultra-low sulfur bio-diesel (a sulfur content of 15 ppm or 0.0015% sulfur by weight or less), gasoline, natural gas, propane, liquefied petroleum gas (LPG), hydrogen, ethanol, methanol, or liquefied/compressed natural gas (LNG/CNG). A facility that receives deliveries of only ultra-low sulfur diesel or ultra-low sulfur bio-diesel is deemed to be compliant with this fuel standard.

[PSCAA Regulation I, Section 15.05(a)]

6.25 The Permittee, when requested in writing by the Director of the Department of Ecology, shall prepare, in consultation with the department, a source emission reduction plan (SERP). This SERP shall be consistent with good industrial practice and safe operating procedures for reducing the emissions of air contaminants into the ambient air during periods of air pollution alert, warning, and emergency.

[WAC 173-435-050]

Chemical Accident Prevention Program

6.26 This stationary source, as defined in 40 CFR 68.3, is subject to 40 CFR Part 68, the Chemical Accident Prevention Provisions. This stationary source shall comply with the requirements of Part 68 by the dates specified in 40 CFR 68.10. This stationary source shall certify compliance with the requirements of Part 68 as part of the annual compliance certification required by Specific Condition **5.3**.

[40 CFR 68.10]
[PSCAA Regulation I, Section 3.25]

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Section 7: Test Methods and Averaging Periods

Unless otherwise specified in the rules or approval conditions, compliance shall be determined based on the averaging periods as described in the table below. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of circumstances beyond the operator's control, compliance may, upon EPA or Puget Sound Clean Air Agency approval, be determined from the arithmetic average of the two other runs.

Table 11. Summary of Test Methods

Test Method	Title	Averaging Period
Puget Sound Clean Air Agency Method 5 Puget Sound Clean Air Agency Board Resolution 540, August 11, 1983	Determination of Particulate Emissions from Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run. Determine the PM emission from the arithmetic average of the three runs.
EPA Method 5 40 CFR 60, Appendix A PSCAA Regulation I, Section 3.25	Determination of Particulate Emissions from Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run. Determine the PM emission from the arithmetic average of the three runs.
EPA Method 6 40 CFR 60, Appendix A PSCAA Regulation I, Section 3.25	Determination Of Sulfur Dioxide Emissions From Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run.
EPA Method 6C 40 CFR 60, Appendix A PSCAA Regulation I, Section 3.25	Determination of Sulfur Dioxide Emissions from Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run.
EPA Method 7 40 CFR 60, Appendix A	Determination of Nitrogen Oxide Emissions from Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run. Determine the NOx emission from the arithmetic average of the three runs.
EPA Method 7e 40 CFR 60, Appendix A PSCAA Regulation I, Section 3.25	Determination of Nitrogen Oxide Emissions from Stationary Sources	The test shall consist of 3 runs and at least 1-hour per run. Determine the NOx emission from the arithmetic average of the three runs.
EPA Method 10 40 CFR 60, Appendix A	Determination of Carbon Monoxide	The test shall consist of 3 runs and at least 1-hour per run. Determine the NOx emission from the arithmetic average of the three runs.
EPA Method 20 40 CFR 60, Appendix A	Determination Of Nitrogen Oxides, Sulfur Dioxide, And Diluent Emissions From Stationary Gas Turbines	The test shall consist of 3 runs and at least 1-hour per run.
Ecology Method 9A, "Source Test Manual – Procedures for Compliance Testing", July 12, 1990	Visual Determination of the Opacity of Emissions from Stationary Sources - for State and Puget Sound Clean Air Agency requirements	Any 13 opacity readings above standard in one hour, opacity readings taken in 15-second intervals.

Test Method	Title	Averaging Period
EPA Method 9 40 CFR 60, Appendix A	Visual Determination of the Opacity of Emissions from Stationary Sources - for Federal Requirements	6-minute averaging period, opacity readings taken in 15-second intervals.
EPA Method 25A 40 CFR Part 60, Appendix A PSCAA Regulation I, Section 3.25	Determination of total gaseous organic concentration using a flame ionization analyzer	The test shall consist of 3 runs and at least 1-hour per run. Determine the emission from the arithmetic average of the three runs.
EPA Method 26 A 40 CFR 60, Appendix A	Determinations of HCl	The test shall consist of 1 run and at least 1-hour per run.
Ash-ASTM D482 Sulfur –ASTM D3120 Halogens – EPA SW846,9076 PCB – EPA SW846, 8080 Lead – EPA 600/4-81-045,200.7 Flash Point – EPA SW846, 1020	Fuel Oil Analysis	None applicable
EPA Method 23 40 CFR 60, Appendix A-7	Determination of Polychlorinated Dibenzo-p-Dioxins, Polychlorinated Dibenzofurans, Polychlorinated Biphenyls, and Polycyclic Aromatic Hydrocarbons from Stationary Sources	The test shall consist of 3 separate runs of at least 3 hours per run and a minimum sample volume of 90 dscf.
EPA Method 18, Method 320 o ASTM D6348-03 40 CFR 60, Appendix A Organic HAP Formaldehyde Benzene Toluene Styrene m-xylene, p-xylene o-xylene actaldehyde napthalene		The test shall include 3 separate runswith a minimum of 1 hour with Raw Mill Off. If Method 18, each run shall collect a minimum target sample volume equivalent to three times the method detection limit.

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Section 8: Insignificant Emission Units and Activities

General

8.1 For the purpose of this permit, an emission unit or activity is insignificant based on one or more of the following:

a. Actual emissions of all regulated air pollutants from a unit or activity are less than the emission thresholds established in WAC 173-401-530(4).

b. The emission unit or activity is listed in WAC 173-401-532 as categorically exempt.

c. The emission unit or activity is listed in WAC 173-401-533 and is considered insignificant if its size or production rate based on maximum rated capacity is below the specified level.

d. The emission unit or activity generates only fugitive emissions as defined in WAC 173-400-030(41).

[WAC 173-401-530(1)]

8.2 No emissions unit or activity subject to a federally enforceable applicable requirement (other than generally applicable requirements of the state implementation plan) shall qualify as an insignificant emissions unit or activity. Generally applicable requirements of the state implementation plan are those federally enforceable requirements that apply universally to all emission units or activities without reference to specific types of emission units or activities.

[WAC 173-401-530(2)(a)]

8.3 This permit does not require testing, monitoring, recordkeeping or reporting or for insignificant emission units or activities, except as required by Puget Sound Clean Air Agency Regulation I, Sections 7.09(b) and 9.20 and their incorporation into this permit. Compliance with Puget Sound Clean Air Agency Regulation I, Sections 7.09(b) and 9.20 as defined in the terms of this permit, shall be deemed to satisfy the requirements of WAC 173-401-615 and 173-401-630(1).

[WAC 173-401-530(2)(c)]

8.4 Insignificant emission units and activities are subject to all General Applicable Requirements set forth in Section 6 of this permit. Where this permit does not require testing, monitoring, recordkeeping and reporting for insignificant emissions units or activities, the Permittee may certify continuous compliance if there were no observed, documented, or known instances of noncompliance during the reporting period. Where this permit requires testing, monitoring, recordkeeping and reporting for insignificant emission units or activities, the Permittee may certify continuous compliance when the testing, monitoring, and recordkeeping required by the permit revealed no violations during the period, and there were no observed, documented, or known instances of noncompliance during the reporting period.

[WAC 173-401-530(2)(d)]

Documentation

8.5 Documentation.

a. Upon request from the PSCAA, the Permittee must provide sufficient documentation to enable the PSCAA to determine that the emission unit or activity has been appropriately listed as insignificant.

b. Upon request from the PSCAA, at any time during the term of the permit, if the Permittee lists an activity or emissions unit as insignificant under condition No.9.1(a) of this section

then upon request from the PSCAA the Permittee shall demonstrate to the PSCAA that the actual emissions of the unit or activity are below the emission thresholds listed in WAC 173-401-530(4).

[WAC 173-401-530(5)]

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8.6 An activity or emissions unit that qualifies as insignificant solely on the basis of Specific Condition **8.1.a** of this section shall not exceed the emissions thresholds specified in WAC 173-401-530(4), until the permit is modified pursuant to WAC 173-401-725.

[WAC 173-401-530(6)]

8.7 Categorically Exempt Insignificant Emission Units. The following units and activities are listed as categorically exempt insignificant emission units per WAC 173-401-532:

Description	WAC 173-401
Lubricating oil storage tanks	WAC 173-401-532(3)
Vehicle maintenance	WAC 173-401-532(7)
Internal combustion engines for propelling or powering a vehicle	WAC 173-401-532(10)
Welding equipment	WAC 173-401-532(12)
Cleaning and sweeping of streets and paved surfaces	WAC 173-401-532(35)
Kerosene, grease, and oil drums	WAC 173-401-532(42)
Truck wash	WAC 173-401-532(45)
Window air conditioners	WAC 173-401-532(46)
Bathroom vents	WAC 173-401-532(48)
Fuel and exhaust emissions from vehicles in parking lots	WAC 173-401-532(54)
Staff vehicles	WAC 173-401-532(54)
Air compressor (electric)	WAC 173-401-532(88)
Diesel Fuel Tank (kiln drive standby) 185 gal	WAC 173-401-533(2)(a)

[WAC 173-401-532]

8.8 Insignificant Emission Units Based on Maximum Rated Capacity. The following units and activities are listed as insignificant based on maximum rated capacity per WAC 173-401-533:

Description	WAC 173-401
Diesel Fuel Tank (kiln drive standby) 185 gal	WAC 173-401-533(2)(a)
Diesel Fuel Tank 1500 gal	WAC 173-401-533(2)(c)
Lignite Tank	WAC 173-401-533(2)(c)
Finish Grinding Aid Tank	WAC 173-401-533(2)(c)
Space Heaters <5 MMBtu/hr	WAC 173-401-533(2)(r)

Description	WAC 173-401
Parts cleaning	WAC 173-401-533(2)(z)
Calibration gases	WAC 173-401-533(3)(c)

[WAC 173-401-533]

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Attachment 1. PSCAA Method 5 for Particulate

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RESOLUTION NO. 540

RESOLUTION OF THE BOARD OF DIRECTORS
OF THE PUGET SOUND AIR POLLUTION
CONTROL AGENCY ADOPTING MODIFIED
PARTICULATE SOURCE TEST PROCEDURES

WHEREAS, Regulation I Section 9.09(f) requires procedures for source sampling performed in connection with standards of Regulation I and II for particulate and gases to be done using current Environmental Protection Agency requirements or procedures and definitions adopted by the Board; and

WHEREAS, to conform to current safe and less toxic chemical storage, the particulate measurement procedures currently used by the Agency have been proposed for modification; and

WHEREAS, the Expanded Advisory Council reviewed and approved said source test laboratory procedure modifications; and

WHEREAS, a public hearing was held by the Puget Sound Air Pollution Control Agency Board of Directors on August 11, 1983, to allow public input and critique on the proposal; and

WHEREAS, the Board deems it necessary to adopt said modification to source test procedures; now therefore,

BE IT RESOLVED BY THE BOARD OF PUGET SOUND AIR POLLUTION CONTROL AGENCY:

The Board of Directors does hereby adopt the modifications to the source test procedures, a copy of which is attached hereto and made a part hereof.

PASSED AND APPROVED by the Board of Directors of the Puget Sound Air Pollution Control Agency held this 11th day of August, 1983.

PUGET SOUND AIR POLLUTION CONTROL AGENCY

By _____
Chairman

Attest:

_____
Air Pollution Control Officer

Approved as to form:

_____
Agency Attorney

Proposed Revised PSAPCA

Particulate Source Test Procedures

Engineering Division

Puget Sound Air Pollution Control Agency
200 West Mercer Street, Room 205
P.O. Box 9863
Seattle, Washington 98109

June 9, 1983

I. Procedures for Particulate Source Sampling

Unless otherwise authorized by the Control Officer, all particulate source sampling performed to demonstrate compliance with the emission standards of Regulation I shall be done using current Environmental Protection Agency Methods 1-5 contained in 40 CFR Part 60, Appendix A, as modified in Section II of this document.

II. Procedure for Determining Particulate Matter in the Impinger Catch (Back Half)

The analysis and calculations for Method 5 shall conform to that described by EPA in the current 40 CFR Part 60, Appendix A, except that the back half catch shall be included as particulate matter. The back half weight is the sum of the impinger catch (organic and inorganic) and the back half acetone rinse weights.

A. Sample Recovery of the Back Half

1. Purging

Whenever SO_2 interference is suspected, purge the impingers immediately after the test run is complete with N_2 or clean air for a minimum of one-half the sample volume.

2. Impinger Liquid

Measure the volume of water collected in all impingers and place the water from the first three impingers in a container. Thoroughly rinse all sample-exposed surfaces between the filter and fourth impinger with water and place in above container.

3. Acetone Rinse

Thoroughly rinse all sample-exposed surfaces between the filter and the fourth impinger with acetone and place the washings in a tared beaker to dry.

B. Analysis of the Back Half

1. Impinger Liquid Extraction

a. Add 50-100 mℓ of dichloromethane to the impinger liquid.

b. Spin for at least ten minutes.

c. Pour the liquid into a separatory funnel and drain the organic phase into a tared beaker (organic fraction).

d. Drain the remaining liquid into a beaker and repeat Steps a, b, and c. Perform the extraction several times with fresh dichloromethane until the organic fraction is clear. Keep each organic extraction in a separate beaker.

e. Following the last extraction, drain the remaining liquid from the separatory funnel into a tared beaker (inorganic fraction).

f. Allow the organic fraction beakers to dry under a hood at room temperature.

g. Evaporate the inorganic fraction in such a manner that the beaker contents do not become exposed to temperatures greater then 212°F.

h. Dry weighed beakers containing a sample of the acetone, dichloromethane and a sample of distilled deionized water to check for blank weight.

i. Desiccate organic, inorganic and blank beakers for at least 24 hours at room temperature in a disiccator containing silica gel. Weigh to a constant weight and report the results to the nearest 0.1 mg. Constant weight is defined in Section 4.3 of Method 5.

2. Back Half Acetone Rinse

a. Dry the acetone rinse in a hood at room temperature.

b. Desiccate and weigh the beaker to constant weight and record.

C. Reagents

1. Water

Use distilled deionized water in the impingers and to rinse all glassware.

2. Acetone

Use reagent grade, $\leq$ 0.001 percent residue in glass bottles.

3. Dichloromethane

Use reagent grade, $\leq$ 0.001 percent residue in glass bottles.

Attachment 2. Ecology Method 9A

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STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

SOURCE TEST METHOD 9A.

VISUAL DETERMINATION OF OPACITY FOR A THREE MINUTE STANDARD

1. Principle

The opacity of emissions from stationary sources is determined visually by a qualified observer.

2. Procedure

The observer must be certified in accordance with the provisions of Section 3 of 40 CFR Part 60, Appendix A, Method 9, as in effect on July 1, 1990, which are hereby adopted by reference.

The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction, and when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, non-circular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of site should not include should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses).

The observer shall record the name of the plant, emission location, type of facility, observer's name and affiliation, and the date on a field data sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on a filed data sheet at the time opacity readings are initiated and completed.

The observer shall make a note of the ambient relative humidity, ambient temperature, the point in the plume the observations were made, the estimated depth of the plume at the point of observation, and the color and condition of the plume. It is also helpful if pictures of the plume are taken.

Visual Determination of Opacity for a Three Minute Standard
Ecology Source Test Method 9A
Revised July 12, 1990
Page 2

Opacity observations shall be made at the point of greatest opacity in the portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume at 15-second intervals.

When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which water vapor is no longer visible

When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

Opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on an observational record sheet. Each momentary observation recorded shall be deemed to represent the average opacity for a 15-second period.

3. Analysis

The opacity of the plume is determined by individual visual observations. Opacity shall be reported as the range of values observed during a specified time period, not to exceed 60 consecutive minutes. The opacity standard is exceeded if there are more than 12 observations, during any consecutive 60-minute period, for which an opacity greater than the standard is recorded.

4. References

Federal Register, Vol. 36, No. 247, page 24895, Dec. 23, 1971.

“Criteria for Smoke and Opacity Training School 1970-1971” Oregon-Washington Air Quality Committee.

“Guidelines for Evaluation of Visible Emissions” EPA 340/1-75-007.

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Attachment 3. 40 CFR 60, Subpart A – General Provisions

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Title 40: Protection of Environment
PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

Subpart A—General Provisions

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§60.1 Applicability.

(a) Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(b) Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility.

(c) In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter.

(d) *Site-specific standard for Merck & Co., Inc.'s Stonewall Plant in Elkton, Virginia.*

(1) This paragraph applies only to the pharmaceutical manufacturing facility, commonly referred to as the Stonewall Plant, located at Route 340 South, in Elkton, Virginia (“site”).
(2) Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.
(3) Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997]

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§60.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.*)

Administrator means the Administrator of the Environmental Protection Agency or his authorized representative.

Affected facility means, with reference to a stationary source, any apparatus to which a standard is applicable.

Alternative method means any method of sampling and analyzing for an air pollutant which is not a reference or equivalent method but which has been demonstrated to the Administrator's satisfaction to, in specific cases, produce results adequate for his determination of compliance.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to Title V of the Act (42 U.S.C. 7661).

Capital expenditure means an expenditure for a physical or operational change to an existing facility which exceeds the product of the applicable “annual asset guideline repair allowance percentage” specified in the latest edition of Internal Revenue Service (IRS) Publication 534 and the existing facility's basis, as defined by section 1012 of the Internal Revenue Code. However, the total expenditure for a physical or operational change to an existing facility must not be reduced by any “excluded additions” as defined in IRS Publication 534, as would be done for tax purposes.

Clean coal technology demonstration project means a project using funds appropriated under the heading ‘Department of Energy-Clean Coal Technology’, up to a total amount of $2,500,000,000 for commercial demonstrations of clean coal technology, or similar projects funded through appropriations for the Environmental Protection Agency.

Commenced means, with respect to the definition of *new source* in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

Continuous monitoring system means the total equipment, required under the emission monitoring sections in applicable subparts, used to sample and condition (if applicable), to analyze, and to provide a permanent record of emissions or process parameters.

Electric utility steam generating unit means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Equivalent method means any method of sampling and analyzing for an air pollutant which has been demonstrated to the Administrator's satisfaction to have a consistent and quantitatively known relationship to the reference method, under specified conditions.

Excess Emissions and Monitoring Systems Performance Report is a report that must be submitted periodically by a source in order to provide data on its compliance with stated emission limits and operating parameters, and on the performance of its monitoring systems.

Existing facility means, with reference to a stationary source, any apparatus of the type for which a standard is promulgated in this part, and the construction or modification of which was commenced before the date of proposal of that standard; or any apparatus which could be altered in such a way as to be of that type.

Force majeure means, for purposes of §60.8, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

Isokinetic sampling means sampling in which the linear velocity of the gas entering the sampling nozzle is equal to that of the undisturbed gas stream at the sample point.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a Title V permit occurs immediately after the EPA takes final action on the final permit.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

Monitoring device means the total equipment, required under the monitoring of operations sections in applicable subparts, used to measure and record (if applicable) process parameters.

Nitrogen oxides means all oxides of nitrogen except nitrous oxide, as measured by test methods set forth in this part.

One-hour period means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Owner or operator means any person who owns, leases, operates, controls, or supervises an affected facility or a stationary source of which an affected facility is a part.

Part 70 permit means any permit issued, renewed, or revised pursuant to part 70 of this chapter.

Particulate matter means any finely divided solid or liquid material, other than uncombined water, as measured by the reference methods specified under each applicable subpart, or an equivalent or alternative method.

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Proportional sampling means sampling at a rate that produces a constant ratio of sampling rate to stack gas flow rate.

Reactivation of a very clean coal-fired electric utility steam generating unit means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

(1) Has not been in operation for the two-year period prior to the enactment of the Clean Air Act Amendments of 1990, and the emissions from such unit continue to be carried in the permitting authority's emissions inventory at the time of enactment;

(2) Was equipped prior to shut-down with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;

(3) Is equipped with low-NO_X burners prior to the time of commencement of operations following reactivation; and

(4) Is otherwise in compliance with the requirements of the Clean Air Act.

Reference method means any method of sampling and analyzing for an air pollutant as specified in the applicable subpart.

Repowering means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the Administrator, in consultation with the Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990. Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the Department of Energy.

Run means the net period of time during which an emission sample is collected. Unless otherwise specified, a run may be either intermittent or continuous within the limits of good engineering practice.

Shutdown means the cessation of operation of an affected facility for any purpose.

Six-minute period means any one of the 10 equal parts of a one-hour period.

Standard means a standard of performance proposed or promulgated under this part.

Standard conditions means a temperature of 293 K (68F) and a pressure of 101.3 kilopascals (29.92 in Hg).

Startup means the setting in operation of an affected facility for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part; and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Volatile Organic Compound means any organic compound which participates in atmospheric photochemical reactions; or which is measured by a reference method, an equivalent method, an alternative method, or which is determined by procedures specified under any subpart.

[44 FR 55173, Sept. 25, 1979, as amended at 45 FR 5617, Jan. 23, 1980; 45 FR 85415, Dec. 24, 1980; 54 FR 6662, Feb. 14, 1989; 55 FR 51382, Dec. 13, 1990; 57 FR 32338, July 21, 1992; 59 FR 12427, Mar. 16, 1994; 72 FR 27442, May 16, 2007]

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§60.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A—ampere
g—gram
Hz—hertz
J—joule
K—degree Kelvin
kg—kilogram
m—meter
m^3—cubic meter
mg—milligram—10^{-3} gram
mm—millimeter—10^{-3} meter
Mg—megagram—10^6 gram
mol—mole
N—newton
ng—nanogram—10^{-9} gram
nm—nanometer—10^{-9} meter
Pa—pascal
s—second
V—volt
W—watt
Ω—ohm
µg—microgram—10^{-6} gram

(b) Other units of measure:

Btu—British thermal unit
°C—degree Celsius (centigrade)
cal—calorie
cfm—cubic feet per minute
cu ft—cubic feet
dcf—dry cubic feet
dcm—dry cubic meter
dscf—dry cubic feet at standard conditions
dscm—dry cubic meter at standard conditions
eq—equivalent
°F—degree Fahrenheit
ft—feet
gal—gallon
gr—grain
g-eq—gram equivalent
hr—hour
in—inch
k—1,000
l—liter
lpm—liter per minute
lb—pound
meq—milliequivalent
min—minute
ml—milliliter
mol. wt.—molecular weight
ppb—parts per billion
ppm—parts per million
psia—pounds per square inch absolute
psig—pounds per square inch gage
°R—degree Rankine
scf—cubic feet at standard conditions
scfh—cubic feet per hour at standard conditions
scm—cubic meter at standard conditions
sec—second
sq ft—square feet
std—at standard conditions

(c) Chemical nomenclature:
CdS—cadmium sulfide
CO—carbon monoxide
CO_2—carbon dioxide
HCl—hydrochloric acid
Hg—mercury
H_2O—water
H_2S—hydrogen sulfide
H_2SO_4—sulfuric acid
N_2—nitrogen
NO—nitric oxide
NO_2—nitrogen dioxide

NO_X—nitrogen oxides
O_2—oxygen
SO_2—sulfur dioxide
SO_3—sulfur trioxide
SO_X—sulfur oxides

(d) Miscellaneous:
A.S.T.M.—American Society for Testing and Materials
[42 FR 37000, July 19, 1977; 42 FR 38178, July 27, 1977]

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§60.4 Address.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the appropriate Regional Office of the U.S. Environmental Protection Agency to the attention of the Director of the Division indicated in the following list of EPA Regional Offices.

Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Office of Ecosystem Protection, U.S. Environmental Protection Agency, 5 Post Office Square—Suite 100, Boston, MA 02109-3912.

Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, Federal Office Building, 26 Federal Plaza (Foley Square), New York, NY 10278.

Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, Mail Code 3AP00, 1650 Arch Street, Philadelphia, PA 19103-2029.

Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee), Director, Air, Pesticides and Toxics Management Division, U.S. Environmental Protection Agency, 61 Forsyth St. SW., Suite 9T43, Atlanta, Georgia 30303-8960.

Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, U.S. Environmental Protection Agency, 77 West Jackson Boulevard, Chicago, IL 60604-3590.

Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas); Director; Air, Pesticides, and Toxics Division; U.S. Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202.

Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219.

Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming) Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129.

Region IX (Arizona, California, Hawaii and Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau), Director, Air Division, U.S. Environmental Protection Agency, 75 Hawthorne Street, San Francisco, CA 94105.

Region X (Alaska, Oregon, Idaho, Washington), Director, Air and Waste Management Division, U.S. Environmental Protection Agency, 1200 Sixth Avenue, Seattle, WA 98101.

(b) Section 111(c) directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards of performance for new stationary sources located in such

State. All information required to be submitted to EPA under paragraph (a) of this section, must also be submitted to the appropriate State Agency of any State to which this authority has been delegated (provided, that each specific delegation may except sources from a certain Federal or State reporting requirement). The appropriate mailing address for those States whose delegation request has been approved is as follows:

(A) – (J) (Not applicable to Florida.)

(K) State of Florida: Florida Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, MS 5500, Tallahassee, Florida 32399-2400.

(c) - (e) (Not applicable to Florida.)

[40 FR 18169, Apr. 25, 1975]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §60.4 see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov.*

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§60.5 Determination of construction or modification.

(a) When requested to do so by an owner or operator, the Administrator will make a determination of whether action taken or intended to be taken by such owner or operator constitutes construction (including reconstruction) or modification or the commencement thereof within the meaning of this part.

(b) The Administrator will respond to any request for a determination under paragraph (a) of this section within 30 days of receipt of such request.

[40 FR 58418, Dec. 16, 1975]

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§60.6 Review of plans.

(a) When requested to do so by an owner or operator, the Administrator will review plans for construction or modification for the purpose of providing technical advice to the owner or operator.

(b) (1) A separate request shall be submitted for each construction or modification project.

(2) Each request shall identify the location of such project, and be accompanied by technical information describing the proposed nature, size, design, and method of operation of each affected facility involved in such project, including information on any equipment to be used for measurement or control of emissions.

(c) Neither a request for plans review nor advice furnished by the Administrator in response to such request shall (1) relieve an owner or operator of legal responsibility for compliance with any provision of this part or of any applicable State or local requirement, or (2) prevent the Administrator from implementing or enforcing any provision of this part or taking any other action authorized by the Act.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974]

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§60.7 Notification and record keeping.

(a) Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification or, if acceptable to both the Administrator and the owner or operator of a source, electronic notification, as follows:

(1) A notification of the date construction (or reconstruction as defined under §60.15) of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.

(2) [Reserved]

(3) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
(4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
(5) A notification of the date upon which demonstration of the continuous monitoring system performance commences in accordance with §60.13(c). Notification shall be postmarked not less than 30 days prior to such date.
(6) A notification of the anticipated date for conducting the opacity observations required by §60.11(e)(1) of this part. The notification shall also include, if appropriate, a request for the Administrator to provide a visible emissions reader during a performance test. The notification shall be postmarked not less than 30 days prior to such date.
(7) A notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during a performance test required by §60.8 in lieu of Method 9 observation data as allowed by §60.11(e)(5) of this part. This notification shall be postmarked not less than 30 days prior to the date of the performance test.

(b) Any owner or operator subject to the provisions of this part shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
(c) Each owner or operator required to install a continuous monitoring device shall submit excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and-or summary report form (see paragraph (d) of this section) to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the following information:
(1) The magnitude of excess emissions computed in accordance with §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

(d) The summary report form shall contain the information and be in the format shown in figure 1 unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in §60.7(c) need not be submitted unless requested by the Administrator.

(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in §60.7(c) shall both be submitted.

FIGURE 1—SUMMARY REPORT—GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

Pollutant (Circle One—SO_2/NO_X/TRS/H_2S/CO/Opacity)

Reporting period dates: From _____ to _____

Company:

Emission Limitation

Address:

Monitor Manufacturer and Model No.

Date of Latest CMS Certification or Audit

Process Unit(s) Description:

Total source operating time in reporting period[1]

Emission data summary[1]		**CMS performance summary[1]**	
1. Duration of excess emissions in reporting period due to:		1. CMS downtime in reporting period due to:	
a. Startup/shutdown		a. Monitor equipment malfunctions	
b. Control equipment problems		b. Non-Monitor equipment malfunctions	
c. Process problems		c. Quality assurance calibration	
d. Other known causes		d. Other known causes	
e. Unknown causes		e. Unknown causes	
2. Total duration of excess emission		2. Total CMS Downtime	
3. Total duration of excess emissions × (100) [Total source operating time]	%[2]	3. [Total CMS Downtime] × (100) [Total source operating time]	%[2]

[1]For opacity, record all times in minutes. For gases, record all times in hours.

[2]For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in §60.7(c) shall be submitted.

On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete.

Name

Signature

Title

Date

(e) (1) Notwithstanding the frequency of reporting requirements specified in paragraph (c) of this section, an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the applicable standard; and
(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in paragraph (e)(2) of this section.
(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in paragraphs (e)(1) and (e)(2) of this section.

(f) Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records, except as follows:
(1) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly

measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(2) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (f) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(3) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (f) of this section, if the Administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(g) If notification substantially similar to that in paragraph (a) of this section is required by any other State or local agency, sending the Administrator a copy of that notification will satisfy the requirements of paragraph (a) of this section.

(h) Individual subparts of this part may include specific provisions which clarify or make inapplicable the provisions set forth in this section.

[36 FR 24877, Dec. 28, 1971, as amended at 40 FR 46254, Oct. 6, 1975; 40 FR 58418, Dec. 16, 1975; 45 FR 5617, Jan. 23, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 52 FR 9781, Mar. 26, 1987; 55 FR 51382, Dec. 13, 1990; 59 FR 12428, Mar. 16, 1994; 59 FR 47265, Sep. 15, 1994; 64 FR 7463, Feb. 12, 1999]

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§60.8 Performance tests.

(a) Except as specified in paragraphs (a)(1),(a)(2), (a)(3), and (a)(4) of this section, within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility, or at such other times specified by this part, and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

(1) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure, the owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(2) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(3) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(4) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(1), (2), and (3) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(c) Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

(d) The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present. If after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting the scheduled performance test, the owner or operator of an affected facility shall notify the Administrator (or delegated State or local agency) as soon as possible of any delay in the original test date, either by providing at least 7 days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Administrator (or delegated State or local agency) by mutual agreement.

(e) The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

(f) Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method.

(1) Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may,

upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

(2) Contents of report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, the report for a performance test shall include the elements identified in paragraphs (f)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

(ii) Purpose of the test including the applicable regulation(s) requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method requires you record or report, the following shall be included: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test program including his/her email address.

(g) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same

entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(1) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60, Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60, Methods 18 and 19 of appendix A-6 of part 60, Methods 20, 22, and 25A of appendix A-7 of part 60, Methods 30A and 30B of appendix A-8 of part 60, and Methods 303, 318, 320, and 321 of appendix A of part 63 of this chapter. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request and the compliance authority may grant a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and report the results of the audit sample to the AASP prior to collecting any emission samples. The test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(2) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(i) Preparing the sample;
(ii) Confirming the true concentration of the sample;
(iii) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range.
(iv) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;
(v) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;
(vi) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;
(vii)The AASP shall report the results from each audit sample in a timely manner to the compliance authority and then to the source owner, operator, or representative. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.
(viii) Evaluating the acceptance limits of samples at least once every two years to determine in cooperation with the voluntary consensus standard body if they should be changed;
(ix) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(3) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:
(i) Checking audit samples to confirm their true value as reported by the AASP;
(ii) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years;
(iii) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(4) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget Circular A-119. A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at *http://standards.gov/standards_gov/a119.cfm.* The VCSB shall approve

all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (g)(2) through (4)of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc.*

(h) Unless otherwise specified in the applicable subpart, each test location must be verified to be free of cyclonic flow and evaluated for the existence of emission gas stratification and the required number of sampling traverse points. If other procedures are not specified in the applicable subpart to the regulations, use the appropriate procedures in Method 1 to check for cyclonic flow and Method 7E to evaluate emission gas stratification and selection of sampling points.

(i) Whenever the use of multiple calibration gases is required by a test method, performance specification, or quality assurance procedure in a part 60 standard or appendix, Method 205 of 40 CFR part 51, appendix M of this chapter, "Verification of Gas Dilution Systems for Field Instrument Calibrations," may be used.

[36 FR 24877, Dec. 23, 1971, as amended at 39 FR 9314, Mar. 8, 1974; 42 FR 57126, Nov. 1, 1977; 44 FR 33612, June 11, 1979; 54 FR 6662, Feb. 14, 1989; 54 FR 21344, May 17, 1989; 64 FR 7463, Feb. 12, 1999; 72 FR 27442, May 16, 2007; 75 FR 55646, Sept. 13, 2010; 79 FR 11241, Feb. 27, 2014; 81 FR 59809, Aug. 30, 2016]

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§60.9 Availability of information.

The availability to the public of information provided to, or otherwise obtained by, the Administrator under this part shall be governed by part 2 of this chapter. (Information submitted voluntarily to the Administrator for the purposes of §§60.5 and 60.6 is governed by §§2.201 through 2.213 of this chapter and not by §2.301 of this chapter.)

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§60.10 State authority.

The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from:

(a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

(b) Requiring the owner or operator of an affected facility to obtain permits, licenses, or approvals prior to initiating construction, modification, or operation of such facility.

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§60.11 Compliance with standards and maintenance requirements.

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

(b) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Method 9 in appendix A of this part, any alternative method that is approved by the Administrator, or as provided in paragraph (e)(5) of this section. For purposes of determining initial compliance, the minimum total time of observations shall be 3 hours (30 6-minute averages) for the performance test or other set of observations (meaning those fugitive-type emission sources subject only to an opacity standard).

(c) The opacity standards set forth in this part shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

(d) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(e) (1) For the purpose of demonstrating initial compliance, opacity observations shall be conducted concurrently with the initial performance test required in §60.8 unless one of the following conditions apply. If no performance test under §60.8 is required, then opacity observations shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated but no later than 180 days after initial startup of the facility. If visibility or other conditions prevent the opacity observations from being conducted concurrently with the initial performance test required under §60.8, the source owner or operator shall reschedule the opacity observations as soon after the initial performance test as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. In these cases, the 30-day prior notification to the Administrator required in §60.7(a)(6) shall be waived. The rescheduled opacity observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under §60.8. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity observations from being made concurrently with the initial performance test in accordance with procedures contained in Method 9 of appendix B of this part. Opacity readings of portions of plumes which contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity standards. The owner or operator of an affected facility shall make available, upon request by the Administrator, such records as may be necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification. Except as provided in paragraph (e)(5) of this section, the results of continuous monitoring by transmissometer which indicate that the opacity at the time visual observations were made was not in excess of the standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the source shall meet the burden of proving that the instrument used meets (at the time of the alleged violation) Performance Specification 1 in appendix B of this part, has been properly maintained and (at the time of the alleged violation) that the resulting data have not been altered in any way.

(2) Except as provided in paragraph (e)(3) of this section, the owner or operator of an affected facility to which an opacity standard in this part applies shall conduct opacity observations in accordance with paragraph (b) of this section, shall record the opacity of emissions, and shall report to the Administrator the opacity results along with the results of the initial performance test required under §60.8. The inability of an owner or operator to secure a visible emissions observer shall not be considered a reason for not conducting the opacity observations concurrent with the initial performance test.

(3) The owner or operator of an affected facility to which an opacity standard in this part applies may request the Administrator to determine and to record the opacity of emissions from the affected facility during the initial performance test and at such times as may be required. The owner or operator of the affected facility shall report the opacity results. Any request to the Administrator to determine and to record the opacity of emissions from an affected facility shall

be included in the notification required in §60.7(a)(6). If, for some reason, the Administrator cannot determine and record the opacity of emissions from the affected facility during the performance test, then the provisions of paragraph (e)(1) of this section shall apply.

(4) An owner or operator of an affected facility using a continuous opacity monitor (transmissometer) shall record the monitoring data produced during the initial performance test required by §60.8 and shall furnish the Administrator a written report of the monitoring results along with Method 9 and §60.8 performance test results.

(5) An owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under §60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under §60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under §60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under §60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under §60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in §60.13(c) of this part, that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine compliance with the opacity standard.

(6) Upon receipt from an owner or operator of the written reports of the results of the performance tests required by §60.8, the opacity observation results and observer certification required by §60.11(e)(1), and the COMS results, if applicable, the Administrator will make a finding concerning compliance with opacity and other applicable standards. If COMS data results are used to comply with an opacity standard, only those results are required to be submitted along with the performance test results required by §60.8. If the Administrator finds that an affected facility is in compliance with all applicable standards for which performance tests are conducted in accordance with §60.8 of this part but during the time such performance tests are being conducted fails to meet any applicable opacity standard, he shall notify the owner or operator and advise him that he may petition the Administrator within 10 days of receipt of notification to make appropriate adjustment to the opacity standard for the affected facility.

(7) The Administrator will grant such a petition upon a demonstration by the owner or operator that the affected facility and associated air pollution control equipment was operated and maintained in a manner to minimize the opacity of emissions during the performance tests; that the performance tests were performed under the conditions established by the Administrator; and that the affected facility and associated air pollution control equipment were incapable of being adjusted or operated to meet the applicable opacity standard.

(8) The Administrator will establish an opacity standard for the affected facility meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity standard in the FEDERAL REGISTER.

(f) Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in paragraphs (a) through (e) of this section.
(g) For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[38 FR 28565, Oct. 15, 1973, as amended at 39 FR 39873, Nov. 12, 1974; 43 FR 8800, Mar. 3, 1978; 45 FR 23379, Apr. 4, 1980; 48 FR 48335, Oct. 18, 1983; 50 FR 53113, Dec. 27, 1985; 51 FR 1790, Jan. 15, 1986; 52 FR 9781, Mar. 26, 1987; 62 FR 8328, Feb. 24, 1997; 65 FR 61749, Oct. 17, 2000]

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§60.12 Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[39 FR 9314, Mar. 8, 1974]

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§60.13 Monitoring requirements.

(a) For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.
(b) All continuous monitoring systems and monitoring devices shall be installed and operational prior to conducting performance tests under §60.8. Verification of operational status shall, as a minimum, include completion of the manufacturer's written requirements or recommendations for installation, operation, and calibration of the device.
(c) If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under §60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, appendix B, of this part before the performance test required under §60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under §60.8 or within 30 days thereafter in accordance with the applicable performance specification in appendix B of this part, The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
    (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under §60.8 and as described in §60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in paragraph (c) of this section at least 10 days before the performance test required under §60.8 is conducted.

(2) Except as provided in paragraph (c)(1) of this section, the owner or operator of an affected facility shall furnish the Administrator within 60 days of completion two or, upon request, more copies of a written report of the results of the performance evaluation.

(d) (1) Owners and operators of a CEMS installed in accordance with the provisions of this part, must check the zero (or low level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once each operating day in accordance with a written procedure. The zero and span must, at a minimum, be adjusted whenever either the 24-hour zero drift or the 24-hour span drift exceeds two times the limit of the applicable performance specification in appendix B of this part. The system must allow the amount of the excess zero and span drift to be recorded and quantified whenever specified. Owners and operators of a COMS installed in accordance with the provisions of this part must check the zero and upscale (span) calibration drifts at least once daily. For a particular COMS, the acceptable range of zero and upscale calibration materials is defined in the applicable version of PS-1 in appendix B of this part. For a COMS, the optical surfaces, exposed to the effluent gases, must be cleaned before performing the zero and upscale drift adjustments, except for systems using automatic zero adjustments. The optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures must be followed for a COMS. Minimum procedures must include an automated method for producing a simulated zero opacity condition and an upscale opacity condition using a certified neutral density filter or other related technique to produce a known obstruction of the light beam. Such procedures must provide a system check of all active analyzer internal optics with power or curvature, all active electronic circuitry including the light source and photodetector assembly, and electronic or electro-mechanical systems and hardware and or software used during normal measurement operation.

(e) Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under paragraph (d) of this section, all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by paragraph (c) of this section for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by paragraph (c) of this section for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(f) All continuous monitoring systems or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of appendix B of this part shall be used.

(g) When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple

breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

(h) (1) Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in §60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period.

(2) For continuous monitoring systems other than opacity, 1-hour averages shall be computed as follows, except that the provisions pertaining to the validation of partial operating hours are only applicable for affected facilities that are required by the applicable subpart to include partial hours in the emission calculations:

(i) Except as provided under paragraph (h)(2)(iii) of this section, for a full operating hour (any clock hour with 60 minutes of unit operation), at least four valid data points are required to calculate the hourly average, *i.e.*, one data point in each of the 15-minute quadrants of the hour.

(ii) Except as provided under paragraph (h)(2)(iii) of this section, for a partial operating hour (any clock hour with less than 60 minutes of unit operation), at least one valid data point in each 15-minute quadrant of the hour in which the unit operates is required to calculate the hourly average.

(iii) For any operating hour in which required maintenance or quality-assurance activities are performed:

(A) If the unit operates in two or more quadrants of the hour, a minimum of two valid data points, separated by at least 15 minutes, is required to calculate the hourly average; or

(B) If the unit operates in only one quadrant of the hour, at least one valid data point is required to calculate the hourly average.

(iv) If a daily calibration error check is failed during any operating hour, all data for that hour shall be invalidated, unless a subsequent calibration error test is passed in the same hour and the requirements of paragraph (h)(2)(iii) of this section are met, based solely on valid data recorded after the successful calibration.

(v) For each full or partial operating hour, all valid data points shall be used to calculate the hourly average.

(vi) Except as provided under paragraph (h)(2)(vii) of this section, data recorded during periods of continuous monitoring system breakdown, repair, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph.

(vii) Owners and operators complying with the requirements of §60.7(f)(1) or (2) must include any data recorded during periods of monitor breakdown or malfunction in the data averages.

(viii) When specified in an applicable subpart, hourly averages for certain partial operating hours shall not be computed or included in the emission averages (e.g., hours with 30 minutes of unit operation under §60.47b(d)).

(ix) Either arithmetic or integrated averaging of all data may be used to calculate the hourly averages. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(3) All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in the applicable subpart. After conversion into units of the standard, the data may be rounded to the same number of significant digits used in the applicable subpart to specify the emission limit.

(i) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring procedures or requirements of this part including, but not limited to the following:

(1) Alternative monitoring requirements when installation of a continuous monitoring system or monitoring device specified by this part would not provide accurate measurements due to liquid water or other interferences caused by substances in the effluent gases.
(2) Alternative monitoring requirements when the affected facility is infrequently operated.
(3) Alternative monitoring requirements to accommodate continuous monitoring systems that require additional measurements to correct for stack moisture conditions.
(4) Alternative locations for installing continuous monitoring systems or monitoring devices when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements.
(5) Alternative methods of converting pollutant concentration measurements to units of the standards.
(6) Alternative procedures for performing daily checks of zero and span drift that do not involve use of span gases or test cells.
(7) Alternatives to the A.S.T.M. test methods or sampling procedures specified by any subpart.
(8) Alternative continuous monitoring systems that do not meet the design or performance requirements in Performance Specification 1, appendix B, but adequately demonstrate a definite and consistent relationship between its measurements and the measurements of opacity by a system complying with the requirements in Performance Specification 1. The Administrator may require that such demonstration be performed for each affected facility.
(9) Alternative monitoring requirements when the effluent from a single affected facility or the combined effluent from two or more affected facilities is released to the atmosphere through more than one point.

(j) An alternative to the relative accuracy (RA) test specified in Performance Specification 2 of appendix B may be requested as follows:
(1) An alternative to the reference method tests for determining RA is available for sources with emission rates demonstrated to be less than 50 percent of the applicable standard. A source owner or operator may petition the Administrator to waive the RA test in Section 8.4 of Performance Specification 2 and substitute the procedures in Section 16.0 if the results of a performance test conducted according to the requirements in §60.8 of this subpart or other tests performed following the criteria in §60.8 demonstrate that the emission rate of the pollutant of interest in the units of the applicable standard is less than 50 percent of the applicable standard. For sources subject to standards expressed as control efficiency levels, a source owner or operator may petition the Administrator to waive the RA test and substitute the procedures in Section 16.0 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the continuous emission monitoring system is used to determine compliance continuously with the applicable standard. The petition to waive the RA test shall include a detailed description of the procedures to be applied. Included shall be location and procedure for conducting the alternative, the concentration or response levels of the alternative RA materials, and the other equipment checks included in the alternative procedure. The Administrator will review the petition for completeness and applicability. The determination to grant a waiver will depend on the intended use of the CEMS data (e.g., data collection purposes other than NSPS) and may require specifications more stringent than in Performance Specification 2 (e.g., the applicable emission limit is more stringent than NSPS).
(2) The waiver of a CEMS RA test will be reviewed and may be rescinded at such time, following successful completion of the alternative RA procedure, that the CEMS data indicate that the source emissions are approaching the level. The criterion for reviewing the waiver is the collection of CEMS data showing that emissions have exceeded 70 percent of the applicable

standard for seven, consecutive, averaging periods as specified by the applicable regulation(s). For sources subject to standards expressed as control efficiency levels, the criterion for reviewing the waiver is the collection of CEMS data showing that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for seven, consecutive, averaging periods as specified by the applicable regulation(s) [e.g., §§60.45(g) (2) and (3), 60.73(e), and §60.84(e)]. It is the responsibility of the source operator to maintain records and determine the level of emissions relative to the criterion on the waiver of RA testing. If this criterion is exceeded, the owner or operator must notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increasing emissions. The Administrator will review the notification and may rescind the waiver and require the owner or operator to conduct a RA test of the CEMS as specified in Section 8.4 of Performance Specification 2.

[40 FR 46255, Oct. 6, 1975]

EDITORIAL NOTES:

1. For FEDERAL REGISTER citations affecting §60.13, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.fdsys.gov.*
2. At 65 FR 61749, Oct. 17, 2000, §60.13 was amended by revising the words “ng/J of pollutant” to read “ng of pollutant per J of heat input” in the sixth sentence of paragraph (h). However, the amendment could not be incorporated because the words “ng/J of pollutant” do not appear in the sixth sentence of paragraph (h).

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§60.14 Modification.

(a) Except as provided under paragraphs (e) and (f) of this section, any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.

(b) Emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable. The Administrator shall use the following to determine emission rate:

(1) Emission factors as specified in the latest issue of “Compilation of Air Pollutant Emission Factors,” EPA Publication No. AP-42, or other emission factors determined by the Administrator to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrates that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in paragraph (b)(1) of this section does not demonstrate to the Administrator's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Administrator's satisfaction that there are reasonable grounds to dispute the result obtained by the Administrator utilizing emission factors as referenced in paragraph (b)(1) of this section. When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters

which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:
  (1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and §60.15.
  (2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
  (3) An increase in the hours of operation.
  (4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by §60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
  (5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.
  (6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

(h) No physical change, or change in the method of operation, at an existing electric utility steam generating unit shall be treated as a modification for the purposes of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the 5 years prior to the change.

(i) Repowering projects that are awarded funding from the Department of Energy as permanent clean coal technology demonstration projects (or similar projects funded by EPA) are exempt from the requirements of this section provided that such change does not increase the maximum hourly emissions of any pollutant regulated under this section above the maximum hourly emissions achievable at that unit during the five years prior to the change.

(j) (1) Repowering projects that qualify for an extension under section 409(b) of the Clean Air Act are exempt from the requirements of this section, provided that such change does not increase the actual hourly emissions of any pollutant regulated under this section above the actual hourly emissions achievable at that unit during the 5 years prior to the change.
  (2) This exemption shall not apply to any new unit that:
    (i) Is designated as a replacement for an existing unit;
    (ii) Qualifies under section 409(b) of the Clean Air Act for an extension of an emission limitation compliance date under section 405 of the Clean Air Act; and
    (iii) Is located at a different site than the existing unit.

(k) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project is exempt from the requirements of this section. A *temporary clean coal control technology demonstration project,* for the purposes of this section is a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the State implementation plan for the State in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(l) The reactivation of a very clean coal-fired electric utility steam generating unit is exempt from the requirements of this section.

[40 FR 58419, Dec. 16, 1975, as amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980; 57 FR 32339, July 21, 1992; 65 FR 61750, Oct. 17, 2000]

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§60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:
  (1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and
  (2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:
  (1) Name and address of the owner or operator.
  (2) The location of the existing facility.
  (3) A brief description of the existing facility and the components which are to be replaced.
  (4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.
  (5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.
  (6) The estimated life of the existing facility after the replacements.
  (7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:
  (1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;
  (2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;
  (3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

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§60.16 Priority list.

PRIORITIZED MAJOR SOURCE CATEGORIES

Priority Number[1]	***Source Category***
1.	Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Volatile Organic Liquid Storage Vessels and Handling Equipment
	(a) SOCMI unit processes
	(b) Volatile organic liquid (VOL) storage vessels and handling equipment
	(c) SOCMI fugitive sources
	(d) SOCMI secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Industrial-Commercial-Institutional Steam Generating Units.
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber
	(a) Tire manufacture
	(b) SBR production
21.	Vegetable Oil
22.	Industrial Surface Coating: Metal Coil

Priority Number[1]	***Source Category***
23.	Petroleum Transportation and Marketing
24.	By-Product Coke Ovens
25.	Synthetic Fibers
26.	Plywood Manufacture
27.	Industrial Surface Coating: Automobiles
28.	Industrial Surface Coating: Large Appliances
29.	Crude Oil and Natural Gas Production
30.	Secondary Aluminum
31.	Potash (Deleted)
32.	Lightweight Aggregate Industry: Clay, Shale, and Slate[2]
33.	Glass
34.	Gypsum
35.	Sodium Carbonate
36.	Secondary Zinc (Deleted)
37.	Polymers and Resins: Phenolic
38.	Polymers and Resins: Urea-Melamine
39.	Ammonia (Deleted)
40.	Polymers and Resins: Polystyrene
41.	Polymers and Resins: ABS-SAN Resins
42.	Fiberglass
43.	Polymers and Resins: Polypropylene
44.	Textile Processing
45.	Asphalt Processing and Asphalt Roofing Manufacture
46.	Brick and Related Clay Products
47.	Ceramic Clay Manufacturing (Deleted)
48.	Ammonium Nitrate Fertilizer
49.	Castable Refractories (Deleted)
50.	Borax and Boric Acid (Deleted)
51.	Polymers and Resins: Polyester Resins
52.	Ammonium Sulfate
53.	Starch
54.	Perlite
55.	Phosphoric Acid: Thermal Process (Deleted)
56.	Uranium Refining
57.	Animal Feed Defluorination (Deleted)
58.	Urea (for fertilizer and polymers)
59.	Detergent (Deleted)
Other Source Categories	
Lead acid battery manufacture[3]	

Priority Number[1]	***Source Category***
Organic solvent cleaning[3]	
Industrial surface coating: metal furniture[3]	
Stationary gas turbines[4]	
Municipal solid waste landfills[4]	

[1]Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.
[2]Formerly titled "Sintering: Clay and Fly Ash".
[3]Minor source category, but included on list since an NSPS is being developed for that source category.
[4]Not prioritized, since an NSPS for this major source category has already been promulgated.
[47 FR 951, Jan. 8, 1982, as amended at 47 FR 31876, July 23, 1982; 51 FR 42796, Nov. 25, 1986; 52 FR 11428, Apr. 8, 1987; 61 FR 9919, Mar. 12, 1996]

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§60.17 Incorporations by reference.

(a) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the EPA must publish notice of change in the FEDERAL REGISTER and the material must be available to the public. All approved material is available for inspection at the EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW., Washington, DC, telephone number 202-566-1744, and is available from the sources listed below. It is also available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030 or go to *http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.*

(b) American Gas Association, available through ILI Infodisk, 610 Winters Avenue, Paramus, New Jersey 07652:
  (1) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 1: General Equations and Uncertainty Guidelines (1990), IBR approved for §60.107a(d).
  (2) American Gas Association Report No. 3: Orifice Metering for Natural Gas and Other Related Hydrocarbon Fluids, Part 2: Specification and Installation Requirements (2000), IBR approved for §60.107a(d).
  (3) American Gas Association Report No. 11: Measurement of Natural Gas by Coriolis Meter (2003), IBR approved for §60.107a(d).
  (4) American Gas Association Transmission Measurement Committee Report No. 7: Measurement of Gas by Turbine Meters (Revised February 2006), IBR approved for §60.107a(d).

(c) American Hospital Association (AHA) Service, Inc., Post Office Box 92683, Chicago, Illinois 60675-2683. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-124), Room M-1500, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
  (1) An Ounce of Prevention: Waste Reduction Strategies for Health Care Facilities. American Society for Health Care Environmental Services of the American Hospital Association. Chicago, Illinois. 1993. AHA Catalog No. 057007. ISBN 0-87258-673-5. IBR approved for §§60.35e and 60.55c.
  (2) [Reserved]

(d) The following material is available for purchase from the American National Standards Institute (ANSI), 25 W. 43rd Street, 4th Floor, New York, NY 10036, Telephone (212) 642-4980, and is also available at the following Web site: *http://www.ansi.org*.
  (1) ANSI No. C12.20-2010 American National Standard for Electricity Meters—0.2 and 0.5 Accuracy Classes (Approved August 31, 2010), IBR approved for §60.5535(d).
  (2) [Reserved]

(e) American Petroleum Institute (API), 1220 L Street NW., Washington, DC 20005.
  (1) API Publication 2517, Evaporation Loss from External Floating Roof Tanks, Second Edition, February 1980, IBR approved for §§60.111(i), 60.111a(f), and 60.116b(e).
  (2) API Manual of Petroleum Measurement Standards, Chapter 22—Testing Protocol, Section 2—Differential Pressure Flow Measurement Devices, First Edition, August 2005, IBR approved for §60.107a(d).

(f) American Public Health Association, 1015 18th Street NW., Washington, DC 20036.
  (1) "Standard Methods for the Examination of Water and Wastewater," 16th edition, 1985. Method 303F: "Determination of Mercury by the Cold Vapor Technique." Incorporated by reference for appendix A-8 to part 60, Method 29, §§9.2.3, 10.3, and 11.1.3.
  (2) 2540 G. Total, Fixed, and Volatile Solids in Solid and Semisolid Samples, in Standard Methods for the Examination of Water and Wastewater, 20th Edition, 1998, IBR approved for §60.154(b).

(g) The following material is available for purchase from the American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990, Telephone (800) 843-2763, and is also available at the following Web site: *http://www.asme.org*.
  (1) ASME Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th Edition (1971), IBR approved for §§60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).
  (2) ASME MFC-3M-2004, Measurement of Fluid Flow in Pipes Using Orifice, Nozzle, and Venturi, IBR approved for §60.107a(d).
  (3) ASME/ANSI MFC-4M-1986 (Reaffirmed 2008), Measurement of Gas Flow by Turbine Meters, IBR approved for §60.107a(d).
  (4) ASME/ANSI MFC-5M-1985 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits Using Transit-Time Ultrasonic Flowmeters, IBR approved for §60.107a(d).
  (5) ASME MFC-6M-1998 (Reaffirmed 2005), Measurement of Fluid Flow in Pipes Using Vortex Flowmeters, IBR approved for §60.107a(d).
  (6) ASME/ANSI MFC-7M-1987 (Reaffirmed 2006), Measurement of Gas Flow by Means of Critical Flow Venturi Nozzles, IBR approved for §60.107a(d).
  (7) ASME/ANSI MFC-9M-1988 (Reaffirmed 2006), Measurement of Liquid Flow in Closed Conduits by Weighing Method, IBR approved for §60.107a(d).
  (8) ASME MFC-11M-2006, Measurement of Fluid Flow by Means of Coriolis Mass Flowmeters, IBR approved for §60.107a(d).
  (9) ASME MFC-14M-2003, Measurement of Fluid Flow Using Small Bore Precision Orifice Meters, IBR approved for §60.107a(d).
  (10) ASME MFC-16-2007, Measurement of Liquid Flow in Closed Conduits with Electromagnetic Flowmeters, IBR approved for §60.107a(d).
  (11) ASME MFC-18M-2001, Measurement of Fluid Flow Using Variable Area Meters, IBR approved for §60.107a(d).
  (12) ASME MFC-22-2007, Measurement of Liquid by Turbine Flowmeters, IBR approved for §60.107a(d).

(13) ASME PTC 4.1-1964 (Reaffirmed 1991), Power Test Codes: Test Code for Steam Generating Units (with 1968 and 1969 Addenda), IBR approved for §§60.46b, 60.58a(h), 60.58b(i), 60.1320(a), and 60.1810(a).
(14) ASME/ANSI PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], (Issued August 31, 1981), IBR approved for §§60.56c(b), 60.63(f), 60.106(e), 60.104a(d), (h), (i), and (j), 60.105a(d), (f), and (g), §60.106a(a), §60.107a(a), (c), and (d), tables 1 and 3 to subpart EEEE, tables 2 and 4 to subpart FFFF, table 2 to subpart JJJJ, §60.285a(f), §§60.4415(a), 60.2145(s) and (t), 60.2710(s), (t), and (w), 60.2730(q), 60.4900(b), 60.5220(b), tables 1 and 2 to subpart LLLL, tables 2 and 3 to subpart MMMM, 60.5406(c), 60.5406a(c), 60.5407a(g), 60.5413(b), 60.5413a(b) and 60.5413a(d).
(15) ASME PTC 22-2014, Gas Turbines: Performance Test Codes, (Issued December 31, 2014), IBR approved for §60.5580.
(16) ASME PTC 46-1996, Performance Test Code on Overall Plant Performance, (Issued October 15, 1997), IBR approved for §60.5580.
(17) ASME QRO-1-1994, Standard for the Qualification and Certification of Resource Recovery Facility Operators, IBR approved for §§60.54b(a) and (b), 60.56a, 60.1185(a) and (c), and 60.1675(a) and (c).

(h) The following material is available for purchase from ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959, (800) 262-1373, *http://www.astm.org.*
(1) ASTM A99-76, Standard Specification for Ferromanganese, IBR approved for §60.261.
(2) ASTM A99-82 (Reapproved 1987), Standard Specification for Ferromanganese, IBR approved for §60.261.
(3) ASTM A100-69, Standard Specification for Ferrosilicon, IBR approved for §60.261.
(4) ASTM A100-74, Standard Specification for Ferrosilicon, IBR approved for §60.261.
(5) ASTM A100-93, Standard Specification for Ferrosilicon, IBR approved for §60.261.
(6) ASTM A101-73, Standard Specification for Ferrochromium, IBR approved for §60.261.
(7) ASTM A101-93, Standard Specification for Ferrochromium, IBR approved for §60.261.
(8) ASTM A482-76, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.
(9) ASTM A482-93, Standard Specification for Ferrochromesilicon, IBR approved for §60.261.
(10) ASTM A483-64, Standard Specification for Silicomanganese, IBR approved for §60.261.
(11) ASTM A483-74 (Reapproved 1988), Standard Specification for Silicomanganese, IBR approved for §60.261.
(12) ASTM A495-76, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
(13) ASTM A495-94, Standard Specification for Calcium-Silicon and Calcium Manganese-Silicon, IBR approved for §60.261.
(14) ASTM D86-78, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
(15) ASTM D86-82, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
(16) ASTM D86-90, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
(17) ASTM D86-93, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).
(18) ASTM D86-95, Distillation of Petroleum Products, IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h).

(19) ASTM D86-96, Distillation of Petroleum Products, (Approved April 10, 1996), IBR approved for §§60.562-2(d), 60.593(d), 60.593a(d), 60.633(h), 60.5401(f), 60.5401a(f).
(20) ASTM D129-64, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(21) ASTM D129-78, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(22) ASTM D129-95, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §§60.106(j) and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(23) ASTM D129-00, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.335(b).
(24) ASTM D129-00 (Reapproved 2005), Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), IBR approved for §60.4415(a).
(25) ASTM D240-76, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(26) ASTM D240-92, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, IBR approved for §§60.46(c), 60.296(b), and appendix A-7: Method 19, Section 12.5.2.2.3.
(27) ASTM D240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, (Approved May 1, 2007), IBR approved for §60.107a(d).
(28) ASTM D270-65, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
(29) ASTM D270-75, Standard Method of Sampling Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
(30) ASTM D323-82, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b, and 60.116b(f).
(31) ASTM D323-94, Test Method for Vapor Pressure of Petroleum Products (Reid Method), IBR approved for §§60.111(l), 60.111a(g), 60.111b, and 60.116b(f).
(32) ASTM D388-77, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
(33) ASTM D388-90, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
(34) ASTM D388-91, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
(35) ASTM D388-95, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
(36) ASTM D388-98a, Standard Specification for Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, and 60.251.
(37) ASTM D388-99 (Reapproved 2004)$^{\epsilon 1}$ Standard Classification of Coals by Rank, IBR approved for §§60.41, 60.45(f), 60.41Da, 60.41b, 60.41c, 60.251, and 60.5580.
(38) ASTM D396-78, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
(39) ASTM D396-89, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).

(40) ASTM D396-90, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
(41) ASTM D396-92, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), and 60.111a(b).
(42) ASTM D396-98, Standard Specification for Fuel Oils, IBR approved for §§60.41b, 60.41c, 60.111(b), 60.111a(b), and 60.5580.
(43) ASTM D975-78, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
(44) ASTM D975-96, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
(45) ASTM D975-98a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.111(b) and 60.111a(b).
(46) ASTM D975-08a, Standard Specification for Diesel Fuel Oils, IBR approved for §§60.41b 60.41c, and 60.5580.
(47) ASTM D1072-80, Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b).
(48) ASTM D1072-90 (Reapproved 1994), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.335(b).
(49) ASTM D1072-90 (Reapproved 1999), Standard Test Method for Total Sulfur in Fuel Gases, IBR approved for §60.4415(a).
(50) ASTM D1137-53, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f).
(51) ASTM D1137-75, Standard Method for Analysis of Natural Gases and Related Types of Gaseous Mixtures by the Mass Spectrometer, IBR approved for §60.45(f).
(52) ASTM D1193-77, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
(53) ASTM D1193-91, Standard Specification for Reagent Water, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.3; Method 5E, Section 7.2.1; Method 5F, Section 7.2.1; appendix A-4 to part 60: Method 6, Section 7.1.1; Method 7, Section 7.1.1; Method 7C, Section 7.1.1; Method 7D, Section 7.1.1; Method 10A, Section 7.1.1; appendix A-5 to part 60: Method 11, Section 7.1.3; Method 12, Section 7.1.3; Method 13A, Section 7.1.2; appendix A-8 to part 60: Method 26, Section 7.1.2; Method 26A, Section 7.1.2; and Method 29, Section 7.2.2.
(54) ASTM D1266-87, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).
(55) ASTM D1266-91, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).
(56) ASTM D1266-98, Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §§60.106(j) and 60.335(b).
(57) ASTM D1266-98 (Reapproved 2003)$^{\varepsilon,1}$ Standard Test Method for Sulfur in Petroleum Products (Lamp Method), IBR approved for §60.4415(a).
(58) ASTM D1475-60 (Reapproved 1980), Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d), appendix A-8 to part 60: Method 24, Section 6.1; and Method 24A, Sections 6.5 and 7.1.

(59) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for §60.435(d), appendix A-8 to part 60: Method 24, Section 6.1; and Method 24A, §§6.5 and 7.1.
(60) ASTM D1552-83, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(61) ASTM D1552-95, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(62) ASTM D1552-01, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §§60.106(j), 60.335(b), and appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(63) ASTM D1552-03, Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method), IBR approved for §60.4415(a).
(64) ASTM D1826-77, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.
(65) ASTM D1826-94, Standard Test Method for Calorific Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, IBR approved for §§60.45(f), 60.46(c), 60.296(b), and appendix A-7 to part 60: Method 19, Section 12.3.2.4.
(66) ASTM D1826-94 (Reapproved 2003), Standard Test Method for Calorific (Heating) Value of Gases in Natural Gas Range by Continuous Recording Calorimeter, (Approved May 10, 2003), IBR approved for §60.107a(d).
(67) ASTM D1835-87, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.
(68) ASTM D1835-91, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.
(69) ASTM D1835-97, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.
(70) ASTM D1835-03a, Standard Specification for Liquefied Petroleum (LP) Gases, IBR approved for §§60.41Da, 60.41b, and 60.41c.
(71) ASTM D1945-64, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).
(72) ASTM D1945-76, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).
(73) ASTM D1945-91, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).
(74) ASTM D1945-96, Standard Method for Analysis of Natural Gas by Gas Chromatography, IBR approved for §60.45(f).
(75) ASTM D1945-03 (Reapproved 2010), Standard Method for Analysis of Natural Gas by Gas Chromatography, (Approved January 1, 2010), IBR approved for §§60.107a(d), 60.5413(d), 60.5413a(d).
(76) ASTM D1946-77, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).
(77) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for §§60.18(f), 60.45(f), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).

(78) ASTM D1946-90 (Reapproved 2006), Standard Method for Analysis of Reformed Gas by Gas Chromatography, (Approved June 1, 2006), IBR approved for §60.107a(d).
(79) ASTM D2013-72, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(80) ASTM D2013-86, Standard Method of Preparing Coal Samples for Analysis, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(81) ASTM D2015-77 (Reapproved 1978), Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(82) ASTM D2015-96, Standard Test Method for Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(83) ASTM D2016-74, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
(84) ASTM D2016-83, Standard Test Methods for Moisture Content of Wood, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
(85) ASTM D2234-76, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.
(86) ASTM D2234-96, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.
(87) ASTM D2234-97b, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.
(88) ASTM D2234-98, Standard Methods for Collection of a Gross Sample of Coal, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.1.
(89) ASTM D2369-81, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(90) ASTM D2369-87, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(91) ASTM D2369-90, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(92) ASTM D2369-92, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(93) ASTM D2369-93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(94) ASTM D2369-95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A-8 to part 60: Method 24, Section 6.2.
(95) ASTM D2382-76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).
(96) ASTM D2382-88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(e), 60.664(e), and 60.704(d).
(97) ASTM D2504-67, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).
(98) ASTM D2504-77, Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).
(99) ASTM D2504-88 (Reapproved 1993), Noncondensable Gases in C3 and Lighter Hydrocarbon Products by Gas Chromatography, IBR approved for §§60.485(g) and 60.485a(g).

(100) ASTM D2584-68(Reapproved 1985), Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c).
(101) ASTM D2584-94, Standard Test Method for Ignition Loss of Cured Reinforced Resins, IBR approved for §60.685(c).
(102) ASTM D2597-94 (Reapproved 1999), Standard Test Method for Analysis of Demethanized Hydrocarbon Liquid Mixtures Containing Nitrogen and Carbon Dioxide by Gas Chromatography, IBR approved for §60.335(b).
(103) ASTM D2622-87, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).
(104) ASTM D2622-94, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).
(105) ASTM D2622-98, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §§60.106(j) and 60.335(b).
(106) ASTM D2622-05, Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a).
(107) ASTM D2879-83Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).
(108) ASTM D2879-96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).
(109) ASTM D2879-97, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for §§60.111b(f)(3), 60.116b(e), 60.116b(f), 60.485(e), and 60.485a(e).
(110) ASTM D2880-78, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).
(111) ASTM D2880-96, Standard Specification for Gas Turbine Fuel Oils, IBR approved for §§60.111(b), 60.111a(b), and 60.335(d).
(112) ASTM D2908-74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).
(113) ASTM D2908-91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, IBR approved for §60.564(j).
(114) ASTM D2986-71, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
(115) ASTM D2986-78, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
(116) ASTM D2986-95a, Standard Method for Evaluation of Air, Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test, IBR approved for appendix A-3 to part 60: Method 5, Section 7.1.1; appendix A-5 to part 60: Method 12, Section 7.1.1; and Method 13A, Section 7.1.1.2.
(117) ASTM D3173-73, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(118) ASTM D3173-87, Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.

(119) ASTM D3176-74, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.
(120) ASTM D3176-89, Standard Method for Ultimate Analysis of Coal and Coke, IBR approved for §60.45(f)(5)(i) and appendix A-7 to part 60: Method 19, Section 12.3.2.3.
(121) ASTM D3177-75, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(122) ASTM D3177-89, Standard Test Method for Total Sulfur in the Analysis Sample of Coal and Coke, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(123) ASTM D3178-73 (Reapproved 1979), Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f).
(124) ASTM D3178-89, Standard Test Methods for Carbon and Hydrogen in the Analysis Sample of Coal and Coke, IBR approved for §60.45(f).
(125) ASTM D3246-81, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
(126) ASTM D3246-92, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
(127) ASTM D3246-96, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.335(b).
(128) ASTM D3246-05, Standard Test Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry, IBR approved for §60.4415(a)(1).
(129) ASTM D3270-73T, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
(130) ASTM D3270-80, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
(131) ASTM D3270-91, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
(132) ASTM D3270-95, Standard Test Methods for Analysis for Fluoride Content of the Atmosphere and Plant Tissues (Semiautomated Method), IBR approved for appendix A-5 to part 60: Method 13A, Section 16.1.
(133) ASTM D3286-85, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(134) ASTM D3286-96, Standard Test Method for Gross Calorific Value of Coal and Coke by the Isoperibol Bomb Calorimeter, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(135) ASTM D3370-76, Standard Practices for Sampling Water, IBR approved for §60.564(j).
(136) ASTM D3370-95a, Standard Practices for Sampling Water, IBR approved for §60.564(j).
(137) ASTM D3588-98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, (Approved May 10, 2003), IBR approved for §§60.107a(d), 60.5413(d), and 60.5413a(d).
(138) ASTM D3699-08, Standard Specification for Kerosine, including Appendix X1, (Approved September 1, 2008), IBR approved for §§60.41b, 60.41c, and 60.5580.
(139) ASTM D3792-79, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.

(140) ASTM D3792-91, Standard Test Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.3.
(141) ASTM D4017-81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
(142) ASTM D4017-90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
(143) ASTM D4017-96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A-7 to part 60: Method 24, Section 6.4.
(144) ASTM D4057-81, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(145) ASTM D4057-95, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.3.
(146) ASTM D4057-95 (Reapproved 2000), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a).
(147) ASTM D4084-82, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h).
(148) ASTM D4084-94, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §60.334(h).
(149) ASTM D4084-05, Standard Test Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), IBR approved for §§60.4360 and 60.4415(a).
(150) ASTM D4177-95, Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.2.1.
(151) ASTM D4177-95 (Reapproved 2000), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, IBR approved for §60.4415(a).
(152) ASTM D4239-85, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(153) ASTM D4239-94, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(154) ASTM D4239-97, Standard Test Methods for Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods, IBR approved for appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(155) ASTM D4294-02, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.335(b).
(156) ASTM D4294-03, Standard Test Method for Sulfur in Petroleum and Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectrometry, IBR approved for §60.4415(a).
(157) ASTM D4442-84, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
(158) ASTM D4442-92, Standard Test Methods for Direct Moisture Content Measurement in Wood and Wood-base Materials, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.
(159) ASTM D4444-92, Standard Test Methods for Use and Calibration of Hand-Held Moisture Meters, IBR approved for appendix A-8 to part 60: Method 28, Section 16.1.1.

(160) ASTM D4457-85 (Reapproved 1991), Test Method for Determination of Dichloromethane and 1,1,1-Trichloroethane in Paints and Coatings by Direct Injection into a Gas Chromatograph, IBR approved for appendix A-7 to part 60: Method 24, Section 6.5.
(161) ASTM D4468-85 (Reapproved 2000), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, IBR approved for §§60.335(b) and 60.4415(a).
(162) ASTM D4468-85 (Reapproved 2006), Standard Test Method for Total Sulfur in Gaseous Fuels by Hydrogenolysis and Rateometric Colorimetry, (Approved June 1, 2006), IBR approved for §60.107a(e).
(163) ASTM D4629-02, Standard Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons by Syringe/Inlet Oxidative Combustion and Chemiluminescence Detection, IBR approved for §§60.49b(e) and 60.335(b).
(164) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for §§60.18(f), 60.485(g), 60.485a(g), 60.564(f), 60.614(d), 60.664(e), and 60.704(d).
(165) ASTM D4809-06, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), (Approved December 1, 2006), IBR approved for §60.107a(d).
(166) ASTM D4810-88 (Reapproved 1999), Standard Test Method for Hydrogen Sulfide in Natural Gas Using Length of Stain Detector Tubes, IBR approved for §§60.4360 and 60.4415(a).
(167) ASTM D4891-89 (Reapproved 2006) Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, (Approved June 1, 2006), IBR approved for §§60.107a(d), 60.5413(d), and 60.5413a(d).
(168) ASTM D5287-97 (Reapproved 2002), Standard Practice for Automatic Sampling of Gaseous Fuels, IBR approved for §60.4415(a).
(169) ASTM D5403-93, Standard Test Methods for Volatile Content of Radiation Curable Materials, IBR approved for appendix A-7 to part 60: Method 24, Section 6.6.
(170) ASTM D5453-00, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.335(b).
(171) ASTM D5453-05, Standard Test Method for Determination of Total Sulfur in Light Hydrocarbons, Motor Fuels and Oils by Ultraviolet Fluorescence, IBR approved for §60.4415(a).
(172) ASTM D5504-01, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, IBR approved for §§60.334(h) and 60.4360.
(173) ASTM D5504-08, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Chemiluminescence, (Approved June 15, 2008), IBR approved for §§60.107a(e) and 60.5413(d).
(174) ASTM D5762-02, Standard Test Method for Nitrogen in Petroleum and Petroleum Products by Boat-Inlet Chemiluminescence, IBR approved for §60.335(b).
(175) ASTM D5865-98, Standard Test Method for Gross Calorific Value of Coal and Coke, IBR approved for §§60.45(f) and 60.46(c), and appendix A-7 to part 60: Method 19, Section 12.5.2.1.3.
(176) ASTM D5865-10, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved January 1, 2010), IBR approved for §§60.45(f), 60.46(c), and appendix A-7 to part 60: Method 19, section 12.5.2.1.3.
(177) ASTM D6216-98, Standard Practice for Opacity Monitor Manufacturers to Certify Conformance with Design and Performance Specifications, IBR approved for appendix B to part 60: Performance Specification 1.

(178) ASTM D6228-98, Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §60.334(h).
(179) ASTM D6228-98 (Reapproved 2003), Standard Test Method for Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels by Gas Chromatography and Flame Photometric Detection, IBR approved for §§60.4360 and 60.4415.
(180) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, (Approved October 1, 2003), IBR approved for §60.73a(b), table 7 to subpart IIII, table 2 to subpart JJJJ, and §60.4245(d).
(181) ASTM D6366-99, Standard Test Method for Total Trace Nitrogen and Its Derivatives in Liquid Aromatic Hydrocarbons by Oxidative Combustion and Electrochemical Detection, IBR approved for §60.335(b)(9).
(182) ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, (Approved October 1, 2004), IBR approved for §60.107a(d) and table 2 to subpart JJJJ.
(183) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for §60.335(a).
(184) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 2 to subpart JJJJ, §§60.5413(b) and (d), and 60.5413a(b).
(185) ASTM D6522-11 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers (Approved December 1, 2011), IBR approved for §60.37f(a), 60.766(a).
(186) ASTM D6667-01, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.335(b).
(187) ASTM D6667-04, Standard Test Method for Determination of Total Volatile Sulfur in Gaseous Hydrocarbons and Liquefied Petroleum Gases by Ultraviolet Fluorescence, IBR approved for §60.4415(a).
(188) ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, including Appendices X1 through X3, (Approved July 15, 2011), IBR approved for §§60.41b, 60.41c, and 60.5580.
(189) ASTM D6784-02, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), IBR approved for §60.56c(b) and appendix B to part 60: Performance Specification 12A, Section 8.6.2.
(190) ASTM D6784-02 (Reapproved 2008) Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), (Approved April 1, 2008), IBR approved for §§60.2165(j) and 60.2730(j), tables 1, 5, 6 and 8 to subpart CCCC, and tables 2, 6, 7, and 9 to subpart DDDD, §§60.4900(b), 60.5220(b), tables 1 and 2 to subpart LLLL, and tables 2 and 3 to subpart MMMM.

(191) ASTM D6911-15, Standard Guide for Packaging and Shipping Environmental Samples for Laboratory Analysis, approved January 15, 2015, IBR approved for appendix A-8: Method 30B.
(192) ASTM D7467-10, Standard Specification for Diesel Fuel Oil, Biodiesel Blend (B6 to B20), including Appendices X1 through X3, (Approved August 1, 2010), IBR approved for §§60.41b, 60.41c, and 60.5580.
(193) ASTM E168-67, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).
(194) ASTM E168-77, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).
(195) ASTM E168-92, General Techniques of Infrared Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400, 60.5400a(f).
(196) ASTM E169-63, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f) .
(197) ASTM E169-77, General Techniques of Ultraviolet Quantitative Analysis, IBR approved for §§60.485a(d), 60.593(b), and 60.593a(b), 60.632(f).
(198) ASTM E169-93, General Techniques of Ultraviolet Quantitative Analysis, (Approved May 15, 1993), IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), and 60.5400a(f).
(199) ASTM E260-73, General Gas Chromatography Procedures, IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).
(200) ASTM E260-91, General Gas Chromatography Procedures, (IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), and 60.632(f).
(201) ASTM E260-96, General Gas Chromatography Procedures, (Approved April 10, 1996), IBR approved for §§60.485a(d), 60.593(b), 60.593a(b), 60.632(f), 60.5400(f), 60.5400a(f) 60.5406(b), and 60.5406a(b)(3).
(202) ASTM E617-13, Standard Specification for Laboratory Weights and Precision Mass Standards, approved May 1, 2013, IBR approved for appendix A-3: Methods 4, 5, 5H, 5I, and appendix A-8: Method 29.
(203) ASTM E871-82 (Reapproved 2013), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved August 15, 2013), IBR approved for appendix A-8: method 28R.
(204) ASTM E1584-11, Standard Test Method for Assay of Nitric Acid, (Approved August 1, 2011), IBR approved for §60.73a(c).
(205) ASTM E2515-11, Standard Test Method for Determination of Particulate Matter Emissions Collected by a Dilution Tunnel, (Approved November 1, 2011), IBR approved for §60.534 and §60.5476.
(206) ASTM E2618-13 Standard Test Method for Measurement of Particulate Matter Emissions and Heating Efficiency of Outdoor Solid Fuel-Fired Hydronic Heating Appliances, (Approved September 1, 2013), IBR approved for §60.5476.
(207) ASTM E2779-10, Standard Test Method for Determining Particulate Matter Emissions from Pellet Heaters, (Approved October 1, 2010), IBR approved for §60.534.
(208) ASTM E2780-10, Standard Test Method for Determining Particulate Matter Emissions from Wood Heaters, (Approved October 1, 2010), IBR approved for appendix A: method 28R.
(209) ASTM UOP539-97, Refinery Gas Analysis by Gas Chromatography, (Copyright 1997), IBR approved for §60.107a(d).

(i) Association of Official Analytical Chemists, 1111 North 19th Street, Suite 210, Arlington, VA 22209.

(1) AOAC Method 9, Official Methods of Analysis of the Association of Official Analytical Chemists (AOAC), 11th edition, 1970, pp. 11-12, IBR approved for §§60.204(b), 60.214(b), 60.224(b), and 60.234(b).
(2) [Reserved]

(j) U.S. Environmental Protection Agency, 1200 Pennsylvania Avenue NW., Washington, DC 20460, (202) 272-0167, *http://www.epa.gov.*
(1) EPA-454/R-98-015, Office of Air Quality Planning and Standards (OAQPS) Fabric Filter Bag Leak Detection Guidance, September 1997, IBR approved for §§60.2145(r), 60.2710(r), 60.4905(b), and 60.5225(b).
(2) EPA-600/R-12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012, IBR approved for §§60.5413(d) and 60.5413a(d).

(k) The Gas Processors Association, 6526 East 60th Street, Tulsa, OK 74145; also available through Information Handling Services, 15 Inverness Way East, PO Box 1154, Englewood, CO 80150-1154. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center, Room 3334, 1301 Constitution Ave. NW., Washington, DC 20460.
(1) Gas Processors Association Standard 2172-09, Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer (2009), IBR approved for §60.107a(d).
(2) Gas Processors Association Standard 2261-00, Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography (2000), IBR approved for §60.107a(d).
(3) Gas Processors Association Standard 2377-86, Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes, 1986 Revision, IBR approved for §§60.105(b), 60.107a(b), 60.334(h), 60.4360, and 60.4415(a).

(l) International Organization for Standardization (ISO) available through IHS Inc., 15 Inverness Way East, Englewood, CO 80112.
(1) ISO 8178-4: 1996(E), Reciprocating Internal Combustion Engines—Exhaust Emission Measurement—part 4: Test Cycles for Different Engine Applications, IBR approved for §60.4241(b).
(2) [Reserved]

(m) International Organization for Standardization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, *http://www.iso.org/iso/home.htm.*
(1) ISO 2314:2009(E), Gas turbines-Acceptance tests, Third edition (December 15, 2009), IBR approved for §60.5580.
(2) ISO 8316: Measurement of Liquid Flow in Closed Conduits—Method by Collection of the Liquid in a Volumetric Tank (1987-10-01)—First Edition, IBR approved for §60.107a(d).

(n) This material is available for purchase from the National Technical Information Services (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161. You may inspect a copy at the EPA's Air and Radiation Docket and Information Center (Docket A-91-61, Item IV-J-125), Room M-1500, 1200 Pennsylvania Ave. NW., Washington, DC 20460.
(1) OMB Bulletin No. 93-17: Revised Statistical Definitions for Metropolitan Areas. Office of Management and Budget, June 30, 1993. NTIS No. PB 93-192-664. IBR approved for §60.31e.
(2) [Reserved]

(o) North American Electric Reliability Corporation, 1325 G Street NW., Suite 600, Washington, DC 20005-3801, *http://www.nerc.com.*
(1) North American Electric Reliability Corporation Reliability Standard EOP-002-3, Capacity and Energy Emergencies, updated November 19, 2012, IBR approved for §§60.4211(f) and 60.4243(d). Also available online: *http://www.nerc.com/files/EOP-002-3_1.pdf.*
(2) [Reserved]

(p) The following material is available for purchase from the Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Suite 115, Peachtree Corners, GA 30092, Telephone (800) 332-8686, and is also available at the following Web site: *http://www.tappi.org.*
(1) TAPPI Method T 624 cm-11, (Copyright 2011), IBR approved, for §§60.285(d) and 60.285a(d).
(2) [Reserved]
(q) Underwriter's Laboratories, Inc. (UL), 333 Pfingsten Road, Northbrook, IL 60062.
(1) UL 103, Sixth Edition revised as of September 3, 1986, Standard for Chimneys, Factory-built, Residential Type and Building Heating Appliance, IBR approved for appendix A-8 to part 60.
(2) [Reserved]
(r) Water Pollution Control Federation (WPCF), 2626 Pennsylvania Avenue NW., Washington, DC 20037.
(1) Method 209A, Total Residue Dried at 103-105 °C, in Standard Methods for the Examination of Water and Wastewater, 15th Edition, 1980, IBR approved for §60.683(b).
(2) [Reserved]
(s) West Coast Lumber Inspection Bureau, 6980 SW. Barnes Road, Portland, OR 97223.
(1) West Coast Lumber Standard Grading Rules No. 16, pages 5-21, 90 and 91, September 3, 1970, revised 1984, IBR approved for appendix A-8 to part 60.
(2) [Reserved]
(t) This material is available for purchase from the Canadian Standards Association (CSA), 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6, Telephone: 800-463-6727.
(1) CSA B415.1-10, Performance Testing of Solid-fuel-burning Heating Appliances, (March 2010), IBR approved for §60.534 and §60.5476. (The standard is also available at *http://shop.csa.ca/en/canada/fuel-burning-equipment/b4151-10/invt/27013322010*)
(2) [Reserved]
(u) This European National (EN) standards material is available for purchase at European Committee for Standardization, Management Centre, Avenue Marnix 17, B-1000 Brussels, Belgium, Telephone: + 32 2 550 08 11.
(1) DIN EN 303-5:2012E (EN 303-5), Heating boilers—Part 5: Heating boilers for solid fuels, manually and automatically stoked, nominal heat output of up to 500 kW—Terminology, requirements, testing and marking, (October 2012), IBR approved for §60.5476. (The standard is also available at *http://www.en-standard.eu/csn-en-303-5-heating-boilers-part-5-heating-boilers-for-solid-fuels-manually-and-automatically-stoked-nominal-heat-output-of-up-to-500-kw-terminology-requirements-testing-and-marking/?gclid = CJXI2P_97MMCFdccgQodan8ATA*)
(2) [Reserved]

[79 FR 11242, Feb. 27, 2014, as amended at 79 FR 18965, Apr. 4, 2014; 80 FR 13701, Mar. 16, 2015; 80 FR 64648, Oct. 23, 2015; 81 FR 35895, June 3, 2016; 81 FR 59313, 59368, Aug. 29, 2016; 81 FR 59809, Aug. 30, 2016; 82 FR 28562, June 23, 2017]

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§60.18 General control device and work practice requirements.

(a) *Introduction.*
(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.
(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) *Flares.* Paragraphs (c) through (f) apply to flares.

(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, V_{max}, as determined by the following equation:

$V_{max} = (X_{H2} - K_1)^* K_2$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, V_{max}, as determined by the method specified in paragraph (f)(6).

(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f) (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

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where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant}, 1.740 \times 10^{-7} \left(\frac{1}{ppm}\right) \left(\frac{g\ mole}{scm}\right) \left(\frac{MJ}{kcal}\right)$$

where the standard temperature for $\left(\frac{g\ mole}{scm}\right)$ is 20°C;

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C_i = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

H_i = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V_{max}, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$\text{Log}_{10}(V_{max}) = (H_T + 28.8)/31.7$

V_{max} = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

H_T = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation.

$V_{max} = 8.706 + 0.7084 (H_T)$

V_{max} = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

H_T = The net heating value as determined in paragraph (f)(3).

(g) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR

part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.

(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) *Leak* means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:

(i) Skip period leak detection and repair;

(ii) Quality improvement plans; or
(iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.

(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

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Where:

E_{dic} = Mass flow rate for the daily instrument check, grams per hour

x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.

E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.
(iv) Establish a mass flow rate by using the following procedures:
(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.
(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.
(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.
(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.
(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §60.13(i).
(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.
(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:
(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.
(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.
(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.
(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.
(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.
(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.
(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by

Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.

(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*

[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008]

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§60.19 General notification and reporting requirements.

(a) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(b) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be delivered or postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery, including the use of electronic media, agreed to by the permitting authority, is acceptable.

(c) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(d) If an owner or operator of an affected facility in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such facility under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. The allowance in the previous sentence applies in each State beginning 1 year after the affected facility is required to be in compliance with the applicable subpart in this part. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(e) If an owner or operator supervises one or more stationary sources affected by standards set under this part and standards set under part 61, part 63, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State with an approved permit program) a common schedule on which periodic reports required by each applicable standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the applicable subpart in this part, or 1 year after the stationary source is required to be in compliance with the applicable 40 CFR part 61 or part 63 of this chapter standard, whichever is latest. Procedures governing the implementation of this provision are specified in paragraph (f) of this section.

(f) (1) (i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (f)(2) and (f)(3) of this section, the owner or operator of an affected facility remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (f)(2) and (f)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

[59 FR 12428, Mar. 16, 1994, as amended at 64 FR 7463, Feb. 12, 1998]

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Table 1 to Subpart A of Part 60—Detection Sensitivity Levels (grams per hour)

Monitoring Frequency per Subpart[a]	Detection Sensitivity Level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a] When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78211, Dec. 22, 2008]

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Attachment 4. 40 CFR 63, Subpart A – General Provisions

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Title 40: Protection of Environment

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

Subpart A—General Provisions

Contents

SOURCE: 59 FR 12430, Mar. 16, 1994, unless otherwise noted.

§63.1 Applicability.

(a) *General.*

(1) Terms used throughout this part are defined in § 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this

part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4)

(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7) -(9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word “calendar” is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) *Initial applicability determination for this part.*

(1) The provisions of this part apply to the owner or operator of any stationary source that—

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3).

(c) *Applicability of this part after a relevant* standard *has been set under this part.*

(1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3) -(4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(6) A major source may become an area source at any time upon reducing its emissions of and potential to emit hazardous air pollutants, as defined in this subpart, to below the major source thresholds established in § 63.2, subject to the provisions in paragraphs (c)(6)(i) and (ii) of this section.

(i) A major source reclassifying to area source status is subject to the applicability of standards, compliance dates and notification requirements specified in (c)(6)(i)(A) of this section. An area source that previously was a major source and becomes a major source again is subject to the applicability of standards, compliance dates, and notification requirements specified in (c)(6)(i)(B) of this section:

(A) A major source reclassifying to area source status under this part remains subject to any applicable major source requirements established under this part until the reclassification becomes effective. After the reclassification becomes effective, the source is subject to any applicable area source requirements established under this part immediately, provided the compliance date for the area source requirements has passed. The owner or operator of a major source that becomes an area source subject to newly applicable area source requirements under this part must comply with the initial notification requirements pursuant to § 63.9(b). The owner or operator of a major source

that becomes an area source must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).

(B) An area source that previously was a major source under this part and that becomes a major source again is subject to the applicable major source requirements established under this part immediately upon becoming a major source again, provided the compliance date for the major source requirements has passed, notwithstanding any provision within the applicable subparts. The owner or operator of an area source that becomes a major source again must comply with the initial notification pursuant to § 63.9(b). The owner or operator must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).

(ii) Becoming an area source does not absolve a source subject to an enforcement action or investigation for major source violations or infractions from the consequences of any actions occurring when the source was major. Becoming a major source does not absolve a source subject to an enforcement action or investigation for area source violations or infractions from the consequences of any actions occurring when the source was an area source.

(iii) After September 10, 2024, affected sources subject to the following 40 CFR part 63 subparts on September 10, 2024, must remain subject to those subparts, and any modifications thereafter, even if the source becomes an area source by reducing both its actual emissions and potential to emit hazardous air pollutants to below major source thresholds: F, G, H, I, L, R, X, CC, GG, II, JJ, KK, LL, MM, EEE, JJJ, LLL, MMM, RRR, UUU, FFFF, JJJJ, MMMM, PPPP, ZZZZ, CCCCC, DDDDD, FFFFF, IIIII, LLLLL, YYYYY, JJJJJJ, EEEEEEE.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 200; 85 FR 73885, Nov. 19, 2020; 89 FR 73307, Sept. 10, 2024; 90 FR 1041, Jan. 7, 20252]

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§63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 *et seq.,* as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means:

(1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if

required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in the FEDERAL REGISTER of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not “federally enforceable” by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise “federally enforceable”;

(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and
(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Force majeure means, for purposes of §63.7, an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents the owner or operator from complying with the regulatory requirement to conduct performance tests within the specified timeframe despite the affected facility's best efforts to fulfill the obligation. Examples of such events are acts of nature, acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance—the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.
(2) Measurement techniques—the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include

continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

(3) Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;
(2) Cost effectiveness of controlling individual equipment;
(3) Flexibility to accommodate common control strategies;
(4) Cost/benefits of emissions averaging;
(5) Incentives for pollution prevention;
(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);
(7) Feasibility and cost of monitoring; and
(8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

One-hour period, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means:

(1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Pollution Prevention means *source* reduction as defined under the Pollution Prevention Act (42 U.S.C. 13101-13109). The definition is as follows:

(1) *Source reduction* is any practice that:

(i) Reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste stream or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and

(ii) Reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants.

(2) The term *source reduction* includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control.

(3) The term *source reduction* does not include any practice that alters the physical, chemical, or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the providing of a service.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable.

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the FEDERAL REGISTER.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by §63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Source at a Performance Track member facility means a major or area source located at a facility which has been accepted by EPA for membership in the Performance Track Program (as described at *www.epa.gov/PerformanceTrack*) and is still a member of the Program. The Performance Track Program is a voluntary program that encourages continuous environmental improvement through the use of environmental management systems, local community outreach, and measurable results.

Standard conditions means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source or portion of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16596, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 72 FR 27443, May 16, 2007; 85 FR 63418, Oct. 7, 2020; 85 FR 73885, Nov. 19, 2020]

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§63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) *System International (SI) units of measure:*

A = ampere
g = gram
Hz = hertz
J = joule
°K = degree Kelvin
kg = kilogram
l = liter
m = meter
m^3 = cubic meter
mg = milligram = 10^{-3} gram
ml = milliliter = 10^{-3} liter
mm = millimeter = 10^{-3} meter
Mg = megagram = 10^6 gram = metric ton
MJ = megajoule
mol = mole
N = newton
ng = nanogram = 10^{-9} gram
nm = nanometer = 10^{-9} meter
Pa = pascal
s = second

V = volt
W = watt
Ω = ohm
µg = microgram = 10^{-6} gram
µl = microliter = 10^{-6} liter

(b) *Other units of measure:*

Btu = British thermal unit
°C = degree Celsius (centigrade)
cal = calorie
cfm = cubic feet per minute
cc = cubic centimeter
cu ft = cubic feet
d = day
dcf = dry cubic feet
dcm = dry cubic meter
dscf = dry cubic feet at standard conditions
dscm = dry cubic meter at standard conditions
eq = equivalent
°F degree Fahrenheit
ft = feet
ft^2 = square feet
ft^3 = cubic feet
gal = gallon
gr = grain
g-eq = gram equivalent
g-mole = gram mole
hr = hour
in. = inch
in. H_2 O = inches of water
K = 1,000
kcal = kilocalorie
lb = pound
lpm = liter per minute
meq = milliequivalent
min = minute
MW = molecular weight
oz = ounces
ppb = parts per billion
ppbw = parts per billion by weight
ppbv = parts per billion by volume
ppm = parts per million
ppmw = parts per million by weight
ppmv = parts per million by volume
psia = pounds per square inch absolute
psig = pounds per square inch gage
°R = degree Rankine
scf = cubic feet at standard conditions
scfh = cubic feet at standard conditions per hour

scm = cubic meter at standard conditions
scmm = cubic meter at standard conditions per minute
sec = second
sq ft = square feet
std = at standard conditions
v/v = volume per volume
yd^2 = square yards
yr = year

(c) *Miscellaneous:*
act = actual
avg = average
I.D. = inside diameter
M = molar
N = normal
O.D. = outside diameter
% = percent
[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

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§63.4 Prohibited activities and circumvention.

(a) *Prohibited activities.*
(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.
(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.
(3) -(5) [Reserved]

(b) *Circumvention.* No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to—
(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;
(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(c) *Fragmentation.* Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

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§63.5 Preconstruction review and notification requirements.

(a) *Applicability.*

(1) This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(2) This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

(b) *Requirements for existing, newly constructed, and reconstructed sources.*

(1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in §63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) *Application for approval of construction or reconstruction.* The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) *General application requirements.*

(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or

reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of §63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:
(A) The applicant's name and address;
(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in §63.2 or in the relevant standard;
(C) The address (i.e., physical location) or proposed address of the source;
(D) An identification of the relevant standard that is the basis of the application;
(E) The expected date of the beginning of actual construction or reconstruction;
(F) The expected completion date of the construction or reconstruction;
(G) [Reserved]
(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and
(I) [Reserved]
(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in §63.9(h) (see §63.9(h)(5)).

(2) *Application for approval of construction.* Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(3) *Application for approval of reconstruction.* Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section—
  (i) A brief description of the affected source and the components that are to be replaced;
  (ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;
  (iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;
  (iv) The estimated life of the affected source after the replacements; and
  (v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.
  (vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

(4) *Additional information.* The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) *Approval of construction or reconstruction.*

(1)
  (i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.
  (ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:
    (A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;
    (B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;
    (C) The extent to which the components being replaced cause or contribute to the emissions from the source; and
    (D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2)

(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with—

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall—

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) *Approval of construction or reconstruction based on prior State preconstruction review.*

(1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also §63.9(b)(2)). The owner or operator must include in the request information sufficient for the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

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§63.6 Compliance with standards and maintenance requirements.

(a) *Applicability.*

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with §63.1(a)(4) unless—

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) *Compliance dates for new and reconstructed sources.*

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are “more stringent” must include control technologies or performance criteria and compliance or compliance assurance methods that are different but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with §63.9(d)

(6) [Reserved]

(7) When an area source increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source, the portion of the facility that meets the definition of a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) *Compliance dates for existing sources.*

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part, except as provided in § 63.1(c)(6)(i). Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.

(3) -(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source and meets the definition of an existing source in the applicable major source standard shall be subject to relevant standards for existing sources. Except as provided in paragraph § 63.1(c)(6)(i)(B), such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) *Operation and maintenance requirements.*

(1)

(i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must 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. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) *Startup, shutdown, and malfunction plan.*

(i) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment used to comply with the relevant standard. The startup, shutdown, and malfunction plan does not need to address any scenario that would not cause the source to exceed an applicable emission limitation in the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to—

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) [Reserved]

(iii) When actions taken by the owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan and describes the actions taken for that event. In addition, the owner or operator must keep records of these events as specified in paragraph 63.10(b), including records of the occurrence and duration of each startup or shutdown (if the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in §63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with §63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic

format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in §63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by §63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator develop a startup, shutdown, and malfunction plan which conforms to the provisions of this part, but may do so by citing to the relevant subpart or subparagraphs of paragraph (e) of this section. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter and the elements of the startup, shutdown, and malfunction plan shall not be considered an applicable requirement as defined in §70.2 and §71.2 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) *Compliance with nonopacity emission standards*—

(1) *Applicability.* The non-opacity emission standards set forth in this part shall apply at all times as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) *Methods for determining compliance.*

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in §63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in §63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in §63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of

this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) *Use of an alternative nonopacity emission standard.*

(1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the FEDERAL REGISTER a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any FEDERAL REGISTER notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with §63.7 and §63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in §63.7 and §63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) *Compliance with opacity and visible emission standards—*

(1) *Applicability.* The opacity and visible emission standards set forth in this part must apply at all times as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) *Methods for determining compliance.*

(i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in

accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if—

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in §63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in §63.7(c) of this section.

(3) [Reserved]

(4) *Notification of opacity or visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with §63.9(f), if such observations are required for the source by a relevant standard.

(5) *Conduct of opacity or visible emission observations.* When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in §63.7 unless one of the following conditions applies:

(A) If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under §63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test

conducted under §63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of §63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) *Availability of records.* The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) *Use of a continuous opacity monitoring system.* \

(i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of §63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under §63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under §63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under §63.7, unless the owner or operator notifies the Administrator in writing to the contrary not later than with the notification under §63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under §63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of §63.8(e), that the COMS has been properly maintained, operated, and data

quality-assured, as specified in §63.8(c) and §63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in §63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) *Finding of compliance.* The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by §63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) *Adjustment to an opacity emission standard.*

(i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under §63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that—

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration emission standard. The Administrator will promulgate the new opacity emission standard in the FEDERAL REGISTER.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) *Extension of compliance with emission standards.*

(1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) *Extension of compliance for early reductions and other reductions—*

(i) *Early reductions.* Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) *Other reductions.* Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) *Request for extension of compliance.* Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4)

(i)

(A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6)

(i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:
(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and
(2) The date by which final compliance is to be achieved.
(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and
(4) The date by which final compliance is to be achieved;
(C) -(D)

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) *Approval of request for extension of compliance.* Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will—
(i) Identify each affected source covered by the extension;
(ii) Specify the termination date of the extension;
(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;
(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and
(v)
(A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or
(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12)
(i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of

compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13)

(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with—

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) *Exemption from compliance with emission standards.* The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16599, Apr. 5, 2002; 68 FR 32600, May 30, 2003; 71 FR 20454, Apr. 20, 2006; 85 FR 73885, Nov. 19, 2020; 86 FR 13821, Mar. 11, 2021]

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§63.7 Performance testing requirements.

(a) *Applicability and performance test dates.*

(1) The applicability of this section is set out in §63.1(a)(4).

(2) Except as provided in paragraph (a)(4) of this section, if required to do performance testing by a relevant standard, and unless a waiver of performance testing is obtained under this section or the conditions of paragraph (c)(3)(ii)(B) of this section apply, the owner or operator of the affected source must perform such tests within 180 days of the compliance date for such source.

(i) -(viii) [Reserved]

(ix) Except as provided in paragraph (a)(4) of this section, when an emission standard promulgated under this part is more stringent than the standard proposed (see §63.6(b)(3)), the owner or operator of a new or reconstructed source subject to that standard for which

construction or reconstruction is commenced between the proposal and promulgation dates of the standard shall comply with performance testing requirements within 180 days after the standard's effective date, or within 180 days after startup of the source, whichever is later. If the promulgated standard is more stringent than the proposed standard, the owner or operator may choose to demonstrate compliance with either the proposed or the promulgated standard. If the owner or operator chooses to comply with the proposed standard initially, the owner or operator shall conduct a second performance test within 3 years and 180 days after the effective date of the standard, or after startup of the source, whichever is later, to demonstrate compliance with the promulgated standard.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(4) If a force majeure is about to occur, occurs, or has occurred for which the affected owner or operator intends to assert a claim of force majeure:

(i) The owner or operator shall notify the Administrator, in writing as soon as practicable following the date the owner or operator first knew, or through due diligence should have known that the event may cause or caused a delay in testing beyond the regulatory deadline specified in paragraph (a)(2) or (a)(3) of this section, or elsewhere in this part, but the notification must occur before the performance test deadline unless the initial force majeure or a subsequent force majeure event delays the notice, and in such cases, the notification shall occur as soon as practicable.

(ii) The owner or operator shall provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in testing beyond the regulatory deadline to the force majeure; describe the measures taken or to be taken to minimize the delay; and identify a date by which the owner or operator proposes to conduct the performance test. The performance test shall be conducted as soon as practicable after the force majeure occurs.

(iii) The decision as to whether or not to grant an extension to the performance test deadline is solely within the discretion of the Administrator. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an extension as soon as practicable.

(iv) Until an extension of the performance test deadline has been approved by the Administrator under paragraphs (a)(4)(i), (a)(4)(ii), and (a)(4)(iii) of this section, the owner or operator of the affected facility remains strictly subject to the requirements of this part.

(b) *Notification of performance test.*

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review an approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This

notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) *Quality assurance* program.

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2)

(i) *Submission of site-specific test plan.* Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The performance testing shall include a test method performance audit (PA) during the performance test. The PAs consist of blind audit samples supplied by an accredited audit sample provider and analyzed during the performance test in order to provide a measure of test data bias. Gaseous audit samples are designed to audit the performance of the sampling system as well as the analytical system and must be collected by the sampling system during the compliance test just as the compliance samples are collected. If a liquid or solid audit sample is designed to audit the sampling system, it must also be collected by the sampling system during the compliance test. If multiple sampling systems or sampling trains are used during the compliance test for any of the test methods, the tester is only required to use one of the sampling systems per method to collect the audit sample. The audit sample must be analyzed by the same analyst using the same analytical reagents and analytical system and at the same time as the compliance samples. Retests are required when there is a failure to produce acceptable results for an audit sample. However, if the audit results do not affect the compliance or noncompliance status of the affected facility, the compliance authority may waive the reanalysis requirement, further audits, or retests and accept the results of the compliance test. Acceptance of the test results shall constitute a waiver of the reanalysis requirement, further audits, or retests. The compliance authority may also use the audit sample failure and the compliance test results as evidence to determine the compliance or noncompliance status of the affected facility. A blind audit sample is a sample whose value is known only to the sample provider and is not revealed to the tested facility until after they report the measured value of the audit sample. For pollutants that exist in the gas phase at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in air or nitrogen that can be introduced into the sampling system of the test method at or near the same entry point as a sample from the emission source. If no gas phase audit samples are available, an acceptable alternative is a sample of the pollutant in the same matrix that would be produced when the sample is

recovered from the sampling system as required by the test method. For samples that exist only in a liquid or solid form at ambient temperature, the audit sample shall consist of an appropriate concentration of the pollutant in the same matrix that would be produced when the sample is recovered from the sampling system as required by the test method. An accredited audit sample provider (AASP) is an organization that has been accredited to prepare audit samples by an independent, third party accrediting body.

(A) The source owner, operator, or representative of the tested facility shall obtain an audit sample, if commercially available, from an AASP for each test method used for regulatory compliance purposes. No audit samples are required for the following test methods: Methods 3A and 3C of appendix A-3 of part 60 of this chapter; Methods 6C, 7E, 9, and 10 of appendix A-4 of part 60; Methods 18 and 19 of appendix A-6 of part 60; Methods 20, 22, and 25A of appendix A-7 of part 60; Methods 30A and 30B of appendix A-8 of part 60; and Methods 303, 318, 320, and 321 of appendix A of this part. If multiple sources at a single facility are tested during a compliance test event, only one audit sample is required for each method used during a compliance test. The compliance authority responsible for the compliance test may waive the requirement to include an audit sample if they believe that an audit sample is not necessary. “Commercially available” means that two or more independent AASPs have blind audit samples available for purchase. If the source owner, operator, or representative cannot find an audit sample for a specific method, the owner, operator, or representative shall consult the EPA Web site at the following URL, *www.epa.gov/ttn/emc,* to confirm whether there is a source that can supply an audit sample for that method. If the EPA Web site does not list an available audit sample at least 60 days prior to the beginning of the compliance test, the source owner, operator, or representative shall not be required to include an audit sample as part of the quality assurance program for the compliance test. When ordering an audit sample, the source owner, operator, or representative shall give the sample provider an estimate for the concentration of each pollutant that is emitted by the source or the estimated concentration of each pollutant based on the permitted level and the name, address, and phone number of the compliance authority. The source owner, operator, or representative shall report the results for the audit sample along with a summary of the emission test results for the audited pollutant to the compliance authority and shall report the results of the audit sample to the AASP. The source owner, operator, or representative shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the AASP. If the method being audited is a method that allows the samples to be analyzed in the field and the tester plans to analyze the samples in the field, the tester may analyze the audit samples prior to collecting the emission samples provided a representative of the compliance authority is present at the testing site. The tester may request, and the compliance authority may grant, a waiver to the requirement that a representative of the compliance authority must be present at the testing site during the field analysis of an audit sample. The source owner, operator, or representative may report the results of the audit sample to the compliance authority and then report the results of the audit sample to the AASP prior to collecting any emission samples. The

test protocol and final test report shall document whether an audit sample was ordered and utilized and the pass/fail results as applicable.

(B) An AASP shall have and shall prepare, analyze, and report the true value of audit samples in accordance with a written technical criteria document that describes how audit samples will be prepared and distributed in a manner that will ensure the integrity of the audit sample program. An acceptable technical criteria document shall contain standard operating procedures for all of the following operations:

(1) Preparing the sample;

(2) Confirming the true concentration of the sample;

(3) Defining the acceptance limits for the results from a well qualified tester. This procedure must use well established statistical methods to analyze historical results from well qualified testers. The acceptance limits shall be set so that there is 95 percent confidence that 90 percent of well qualified labs will produce future results that are within the acceptance limit range;

(4) Providing the opportunity for the compliance authority to comment on the selected concentration level for an audit sample;

(5) Distributing the sample to the user in a manner that guarantees that the true value of the sample is unknown to the user;

(6) Recording the measured concentration reported by the user and determining if the measured value is within acceptable limits;

(7) Reporting the results from each audit sample in a timely manner to the compliance authority and to the source owner, operator, or representative by the AASP. The AASP shall make both reports at the same time and in the same manner or shall report to the compliance authority first and then report to the source owner, operator, or representative. The results shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, and whether the testing company passed or failed the audit. The AASP shall report the true value of the audit sample to the compliance authority. The AASP may report the true value to the source owner, operator, or representative if the AASP's operating plan ensures that no laboratory will receive the same audit sample twice.

(8) Evaluating the acceptance limits of samples at least once every two years to determine in consultation with the voluntary consensus standard body if they should be changed.

(9) Maintaining a database, accessible to the compliance authorities, of results from the audit that shall include the name of the facility tested, the date on which the compliance test was conducted, the name of the company performing the sample collection, the name of the company that analyzed the compliance samples including the audit sample, the measured result for the audit sample, the true value of the audit sample, the acceptance range for the measured value, and whether the testing company passed or failed the audit.

(C) The accrediting body shall have a written technical criteria document that describes how it will ensure that the AASP is operating in accordance with the AASP technical criteria

document that describes how audit samples are to be prepared and distributed. This document shall contain standard operating procedures for all of the following operations:

(1) Checking audit samples to confirm their true value as reported by the AASP.

(2) Performing technical systems audits of the AASP's facilities and operating procedures at least once every two years.

(3) Providing standards for use by the voluntary consensus standard body to approve the accrediting body that will accredit the audit sample providers.

(D) The technical criteria documents for the accredited sample providers and the accrediting body shall be developed through a public process guided by a voluntary consensus standards body (VCSB). The VCSB shall operate in accordance with the procedures and requirements in the Office of Management and Budget *Circular A-119.* A copy of Circular A-119 is available upon request by writing the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th Street, NW., Washington, DC 20503, by calling (202) 395-6880 or downloading online at *http://standards.gov/standards_gov/a119.cfm.* The VCSB shall approve all accrediting bodies. The Administrator will review all technical criteria documents. If the technical criteria documents do not meet the minimum technical requirements in paragraphs (c)(2)(iii)(B) through (C) of this section, the technical criteria documents are not acceptable and the proposed audit sample program is not capable of producing audit samples of sufficient quality to be used in a compliance test. All acceptable technical criteria documents shall be posted on the EPA Web site at the following URL, *http://www.epa.gov/ttn/emc.*

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) *Approval of site-specific test plan.*

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(d) *Performance testing facilities.* If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) *Conduct of performance tests.*

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal

operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under §63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator—
  (i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in §63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or
  (ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in §63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or
  (iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or
  (iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that—
  (i) A sample is accidentally lost after the testing team leaves the site; or
  (ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or
  (iii) Extreme meteorological conditions occur; or
  (iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) *Use of an alternative test method*—\
(1) *General.* Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator—
  (i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with the notification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under §63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) *Data analysis, recordkeeping, and reporting.*

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is “completed” when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see §63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title

V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) Contents of a performance test, CMS performance evaluation, or CMS quality assurance test report (electronic or paper submitted copy). Unless otherwise specified in a relevant standard, test method, CMS performance specification, or quality assurance requirement for a CMS, or as otherwise approved by the Administrator in writing, the report shall include the elements identified in paragraphs (g)(2)(i) through (vi) of this section.

(i) General identification information for the facility including a mailing address, the physical address, the owner or operator or responsible official (where applicable) and his/her email address, and the appropriate Federal Registry System (FRS) number for the facility.

(ii) Purpose of the test including the applicable regulation requiring the test, the pollutant(s) and other parameters being measured, the applicable emission standard, and any process parameter component, and a brief process description.

(iii) Description of the emission unit tested including fuel burned, control devices, and vent characteristics; the appropriate source classification code (SCC); the permitted maximum process rate (where applicable); and the sampling location.

(iv) Description of sampling and analysis procedures used and any modifications to standard procedures, quality assurance procedures and results, record of process operating conditions that demonstrate the applicable test conditions are met, and values for any operating parameters for which limits were being set during the test.

(v) Where a test method, CEMS, PEMS, or COMS performance specification, or on-going quality assurance requirement for a CEMS, PEMS, or COMS requires you record or report, the following shall be included in your report: Record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, chain-of-custody documentation, and example calculations for reported results.

(vi) Identification of the company conducting the performance test including the primary office address, telephone number, and the contact for this test including his/her email address.

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) *Waiver of performance tests.*

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) *Request to waive a performance test.*

(i) If a request is made for an extension of compliance under §63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the

owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under §63.6(i), §63.9(h), and §63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) *Approval of request to waive performance test.* The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she—

(i) Approves or denies an extension of compliance under §63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under §63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

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§63.8 Monitoring requirements.

(a) *Applicability.*

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(4) Additional monitoring requirements for control devices used to comply with provisions in relevant standards of this part are specified in §63.11.

(b) *Conduct of monitoring.*

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator—

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see §63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see §63.90(a) for definition).

(iii) Owners or operators with flares subject to §63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2)

(i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is—

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) *Operation and maintenance of continuous monitoring systems.*

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices.

(i) The owner or operator of an affected source must maintain and operate each CMS as specified in §63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop a written startup, shutdown, and malfunction plan for CMS as specified in §63.6(e)(3).

(2)

(i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under §63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(4) Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level calibration drift adjustments, all CMS, including COMS and CEMS, shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(i) All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(ii) All CEMS for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(5) Unless otherwise approved by the Administrator, minimum procedures for COMS shall include a method for producing a simulated zero opacity condition and an upscale (high-level) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of all the analyzer's internal optical surfaces and all electronic circuitry, including the lamp and photodetector assembly normally used in the measurement of opacity.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.

(7)

(i) A CMS is out of control if—

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in §63.10(e)(3).

(d) *Quality control program.*

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;
(ii) Determination and adjustment of the calibration drift of the CMS;
(iii) Preventive maintenance of the CMS, including spare parts inventory;
(iv) Data recording, calculations, and reporting;
(v) Accuracy audit procedures, including sampling and analysis methods; and
(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) *Performance evaluation of continuous monitoring systems—*

(1) *General.* When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) *Notification of performance evaluation.* The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under §63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3)

(i) *Submission of site-specific performance evaluation test plan.* Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in §63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation

within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall—

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) *Conduct of performance evaluation and performance evaluation dates.* The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under §63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under §63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under §63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under §63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in §63.7(a), or as otherwise specified in the relevant standard.

(5) *Reporting performance evaluation results.*

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation containing the information specified in § 63.7(g)(2)(i) through (vi) simultaneously with the results of the performance test required under §63.7 or within 60 days of completion of the performance evaluation, unless otherwise specified in a relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under §63.7 is conducted.

(f) *Use of an alternative monitoring method—*

(1) *General.* Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in §63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:
  (i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;
  (ii) Alternative monitoring requirements when the affected source is infrequently operated;
  (iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;
  (iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;
  (v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;
  (vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;
  (vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;
  (viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or
  (ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4)
  (i) *Request to use alternative monitoring procedure.* An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under §63.7(f).
  (ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in §63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this

section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) *Approval of request to use alternative monitoring procedure.*

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with—

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by §63.8(f).

(6) *Alternative to the relative accuracy test.* An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) *Criteria for approval of alternative procedures.* An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in §63.7, or other tests performed following the criteria in §63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the

procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) *Petition to use alternative to relative accuracy test.* The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) *Rescission of approval to use alternative to relative accuracy test.* The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 8.4 of Performance Specification 2.

(g) *Reduction of monitoring data.*

(1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute

period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in §63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

(5) Monitoring data recorded during periods of unavoidable CMS breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high-level adjustments must not be included in any data average computed under this part. For the owner or operator complying with the requirements of §63.10(b)(2)(vii)(A) or (B), data averages must include any data recorded during periods of monitor breakdown or malfunction.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16603, Apr. 5, 2002; 71 FR 20455, Apr. 20, 2006; 79 FR 11277, Feb. 27, 2014; 83 FR 56725, Nov. 14, 2018]

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§63.9 Notification requirements.

(a) *Applicability and general information.*

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4)

(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) *Initial notifications.*

(1)

(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source subsequently becomes a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements

of this section. Area sources previously subject to major source requirements that become major sources again are also subject to the notification requirements of this paragraph and must submit the notification according to the requirements of paragraph (k) of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under §63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i); and

(ii) -(iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under §63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in §63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in §63.5(d)(1)(i).

(c) *Request for extension of compliance.* If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with §63.6(i)(5) of this subpart,

he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in §63.6(i)(4) through §63.6(i)(6).

(d) *Notification that source is subject to special compliance requirements.* An owner or operator of a new source that is subject to special compliance requirements as specified in §63.6(b)(3) and §63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) *Notification of performance test.* The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under §63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) *Notification of opacity and visible emission observations.* The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in §63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under §63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) *Additional notification requirements for sources with continuous monitoring systems.* The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under §63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under §63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under §63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by §63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by §63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by §63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) *Notification of compliance status.*

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2)

(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list—
(A) The methods that were used to determine compliance;
(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;
(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;
(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;
(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);
(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and
(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority

following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in §63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of §63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) *Adjustment to time periods or postmark deadlines for submittal and review of required communications.*

(1)

(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) *Change in information already provided.* Any change in the information already provided under this section shall be provided to the Administrator within 15 calendar days after the change. The owner or operator of a major source that reclassifies to area source status is also subject to the notification requirements of this paragraph. The owner or operator may submit the application for reclassification with the regulatory authority (*e.g.,* permit application) according to paragraph (k) of this section to fulfill the requirements of this paragraph, but the information required in paragraphs (j)(1) through (4) of this section must be included. A source which reclassified after January 25, 2018, and before January 19, 2021, and has not yet provided the notification of a change in information is required to provide such notification no later than February 2, 2021, according to the requirements of paragraph (k) of this section. Beginning January 19, 2021, the owner or operator of

a major source that reclassifies to area source status must submit the notification according to the requirements of paragraph (k) of this section. A notification of reclassification must contain the following information:

(1) The name and address of the owner or operator;
(2) The address (*i.e.,* physical location) of the affected source;
(3) An identification of the standard being reclassified from and to (if applicable); and
(4) Date of effectiveness of the reclassification.

(k) ***Electronic submission of notifications or reports.*** If you are required to submit notifications or reports following the procedure specified in this paragraph (k), you must submit notifications or reports to the EPA via the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). The notification or report must be submitted by the deadline specified. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report or notification, you must submit the information claimed to be CBI according to the procedures in paragraph (k)(3) of this section.

(1) If you are required to electronically submit a notification or report by this paragraph (k) through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the electronic submittal requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (k)(1)(i) through (vii) of this section.

(i) You must have been or will be precluded from accessing CEDRI and submitting a required notification or report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.
(ii) The outage must have occurred within the period of time beginning 5 business days prior to the date that the notification or report is due.
(iii) The outage may be planned or unplanned.
(iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in reporting.
(v) You must provide to the Administrator a written description identifying:
(A) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;
(B) A rationale for attributing the delay in submitting beyond the regulatory deadline to EPA system outage;
(C) Measures taken or to be taken to minimize the delay in submitting; and
(D) The date by which you propose to submit, or if you have already met the electronic submittal requirement in this paragraph (k) at the time of the notification, the date you submitted the notification or report.
(vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.
(vii) In any circumstance, the notification or report must be submitted electronically as soon as possible after the outage is resolved.

(2) If you are required to electronically submit a notification or report by this paragraph (k) through CEDRI in the EPA's CDX, you may assert a claim of force majeure for failure to timely comply with the electronic submittal requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (k)(2)(i) through (v) of this section.

(i) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning five business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a notification or report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(ii) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or has caused a delay in submitting through CEDRI.

(iii) You must provide to the Administrator:

(A) A written description of the force majeure event;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(C) (Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to submit the notification or report, or if you have already met the electronic submittal requirement in this paragraph (k) at the time of the notification, the date you submitted the notification or report.

(iv) The decision to accept the claim of force majeure and allow an extension to the submittal deadline is solely within the discretion of the Administrator.

(v) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(3) If you wish to assert a CBI claim for some of the information submitted under paragraph (k) of this section, you must submit a complete file, including information claimed to be CBI, to the EPA following the procedures in paragraphs (k)(3)(i) through (iv) of this section. Where a subpart specifies a specific file format for the report or notification for which you are asserting a claim of CBI, the complete file that you submit under this paragraph (k)(3) must be in the same file format specified in the subpart.

(i) Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data are not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.

(ii) You must submit the same file submitted to the CBI office with the CBI omitted to the EPA via the EPA's CDX as described in paragraph (k) of this section.

(iii) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address *oaqpscbi@epa.gov*, and as described above, should include clear CBI markings. Electronic Reporting Tool (ERT) files should be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should be flagged to the attention of the Sector Lead for the subpart for which you are submitting your notification or report. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email *oaqpscbi@epa.gov* to request a file transfer link.

(iv) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer, Mail Drop: C404-02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. ERT files should also be flagged to the attention of the Group Leader, Measurement Policy Group; all other files should also be flagged to the attention of the Sector Lead for the subpart for which you are submitting your notification or report. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003; 85 FR 73885, Nov. 19, 2020; 89 FR 73307, Sept. 10, 2024]

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§63.10 Recordkeeping and reporting requirements.

(a) *Applicability and general information.*

(1) The applicability of this section is set out in §63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4)

(i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in §63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each

report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in §63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in §63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in §63.9(i).

(b) *General recordkeeping requirements.*

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of—

(i) The occurrence and duration of each startup or shutdown when the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards;
(ii) The occurrence and duration of each malfunction of operation (i.e., process equipment) or the required air pollution control and monitoring equipment;
(iii) All required maintenance performed on the air pollution control and monitoring equipment;
(iv)
(A) Actions taken during periods of startup or shutdown when the source exceeded applicable emission limitations in a relevant standard and when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)); or
(B) Actions taken during periods of malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when the actions taken are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3));
(v) All information necessary, including actions taken, to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see §63.6(e)(3)) when all actions taken during periods of startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);
(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);
(vii)All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);
(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.
(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and

where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under §63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under §63.9.

(3) If an owner or operator determines that his or her existing or new stationary source is in the source category regulated by a standard established pursuant to section 112 of the Act, but that source is not subject to the relevant standard (or other requirement established under this part) because of enforceable limitations on the source's potential to emit, or the source otherwise qualifies for an exclusion, the owner or operator must keep a record of the applicability determination. The applicability determination must be kept on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part), whichever comes first if the determination is made prior to January 19, 2021. The applicability determination must be kept until the source changes its operations to become an affected source subject to the relevant standard (or other requirement established under this part) if the determination was made on or after January 19, 2021. The record of the applicability determination must be signed by the person making the determination and include an emissions analysis (or other information) that demonstrates the owner or operator's conclusion that the source is unaffected (*e.g.,* because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make an applicability finding for the source with regard to the relevant standard or other requirement. If applicable, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in

making applicability determinations under section 112 of the Act, if any. The requirements to determine applicability of a standard under § 63.1(b)(3) and to record the results of that determination under this paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) *Additional recordkeeping requirements for sources with continuous monitoring systems.* In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of—

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2) -(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in §63.8(c)(7);

(7) The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source;

(8) The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source;

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under §63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in §63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) *General reporting requirements.*

(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, and except as provided in §63.16, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) *Reporting results of performance tests.* Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under §63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required

performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under §63.9(h).

(3) *Reporting results of opacity or visible emission observations.* The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under §63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under §63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) *Progress reports.* The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5)

(i) *Periodic startup, shutdown, and malfunction reports.* If actions taken by an owner or operator during a startup or shutdown (and the startup or shutdown causes the source to exceed any applicable emission limitation in the relevant emission standards), or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see §63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Actions taken to minimize emissions during such startups, shutdowns, and malfunctions shall be summarized in the report and may be done in checklist form; if actions taken are the same for each event, only one checklist is necessary. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup or shutdown caused the source to exceed any applicable emission limitation in the relevant emission standards, or if a malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the

excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) *Immediate startup, shutdown, and malfunction reports.* Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup or shutdown that caused the source to exceed any applicable emission limitation in the relevant emission standards, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred (or could have occurred in the case of malfunctions), and actions taken to minimize emissions in conformance with §63.6(e)(1)(i). Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in §63.9(i).

(e) *Additional reporting requirements for sources with continuous monitoring systems*—

(1) *General.* When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) *Reporting results of continuous monitoring system performance evaluations.*

(i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under §63.8(e), simultaneously with the results of the performance test required under §63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under §63.8(e). The copies shall be

furnished at least 15 calendar days before the performance test required under §63.7 is conducted.

(3) *Excess emissions and continuous monitoring system performance report and summary report.*

(i) Excess emissions and parameter monitoring exceedances are defined in relevant standards. The owner or operator of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Administrator semiannually, except when—

(A) More frequent reporting is specifically required by a relevant standard;

(B) The Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source; or

(C) [Reserved]

(D) The affected source is complying with the Performance Track Provisions of §63.16, which allows less frequent reporting.

(ii) *Request to reduce frequency of excess emissions and continuous monitoring system performance reports.* Notwithstanding the frequency of reporting requirements specified in paragraph (e)(3)(i) of this section, an owner or operator who is required by a relevant standard to submit excess emissions and continuous monitoring system performance (and summary) reports on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(A) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected source's excess emissions and continuous monitoring system performance reports continually demonstrate that the source is in compliance with the relevant standard;

(B) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in this subpart and the relevant standard; and

(C) The Administrator does not object to a reduced frequency of reporting for the affected source, as provided in paragraph (e)(3)(iii) of this section.

(iii) The frequency of reporting of excess emissions and continuous monitoring system performance (and summary) reports required to comply with a relevant standard may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the 5-year recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(iv) As soon as CMS data indicate that the source is not in compliance with any emission limitation or operating parameter specified in the relevant standard, the frequency of reporting shall revert to the frequency specified in the relevant standard, and the owner or operator shall submit an excess emissions and continuous monitoring system performance (and summary) report for the noncomplying emission points at the next appropriate reporting period following the noncomplying event. After demonstrating ongoing compliance with the relevant standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard, as provided for in paragraphs (e)(3)(ii) and (e)(3)(iii) of this section.

(v) *Content and submittal dates for excess emissions and monitoring system performance reports.* All excess emissions and monitoring system performance reports and all summary reports, if required, shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. Written reports of excess emissions or exceedances of process or control system parameters shall include all the information required in paragraphs (c)(5) through (c)(13) of this section, in §§63.8(c)(7) and 63.8(c)(8), and in the relevant standard, and they shall contain the name, title, and signature of the responsible official who is certifying the accuracy of the report. When no excess emissions or exceedances of a parameter have occurred, or a CMS has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

(vi) *Summary report.* As required under paragraphs (e)(3)(vii) and (e)(3)(viii) of this section, one summary report shall be submitted for the hazardous air pollutants monitored at each affected source (unless the relevant standard specifies that more than one summary report is required, e.g., one summary report for each hazardous air pollutant monitored). The summary report shall be entitled “Summary Report—Gaseous and Opacity Excess Emission and Continuous Monitoring System Performance” and shall contain the following information:

(A) The company name and address of the affected source;
(B) An identification of each hazardous air pollutant monitored at the affected source;
(C) The beginning and ending dates of the reporting period;
(D) A brief description of the process units;
(E) The emission and operating parameter limitations specified in the relevant standard(s);
(F) The monitoring equipment manufacturer(s) and model number(s);
(G) The date of the latest CMS certification or audit;
(H) The total operating time of the affected source during the reporting period;
(I) An emission data summary (or similar summary if the owner or operator monitors control system parameters), including the total duration of excess emissions during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of excess emissions expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total duration of excess emissions during the reporting period into those that are due to startup/shutdown, control equipment problems, process problems, other known causes, and other unknown causes;
(J) A CMS performance summary (or similar summary if the owner or operator monitors control system parameters), including the total CMS downtime during the reporting period (recorded in minutes for opacity and hours for gases), the total duration of CMS

downtime expressed as a percent of the total source operating time during that reporting period, and a breakdown of the total CMS downtime during the reporting period into periods that are due to monitoring equipment malfunctions, nonmonitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes;

(K) A description of any changes in CMS, processes, or controls since the last reporting period;

(L) The name, title, and signature of the responsible official who is certifying the accuracy of the report; and

(M) The date of the report.

(vii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report shall be submitted, and the full excess emissions and continuous monitoring system performance report need not be submitted unless required by the Administrator.

(viii) If the total duration of excess emissions or process or control system parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, both the summary report and the excess emissions and continuous monitoring system performance report shall be submitted.

(4) *Reporting continuous opacity monitoring system data produced during a performance test.* The owner or operator of an affected source required to use a COMS shall record the monitoring data produced during a performance test required under §63.7 and shall furnish the Administrator a written report of the monitoring results. The report of COMS data shall be submitted simultaneously with the report of the performance test results required in paragraph (d)(2) of this section.

(f) *Waiver of recordkeeping or reporting requirements.*

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under §63.6(i), any required compliance progress report or compliance status report required under this part (such as under §§63.6(i) and 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she—
  (i) Approves or denies an extension of compliance; or
  (ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or
  (iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003; 69 FR 21752, Apr. 22, 2004; 71 FR 20455, Apr. 20, 2006; 85 FR 73886, Nov. 19, 2020]

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§63.11 Control device and work practice requirements.

(a) *Applicability.*

(1) The applicability of this section is set out in §63.1(a)(4).

(2) This section contains requirements for control devices used to comply with applicable subparts of this part. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(3) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) *Flares.*

(1) Owners or operators using flares to comply with the provisions of this part shall monitor these control devices to assure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators using flares shall monitor these control devices.

(2) Flares shall be steam-assisted, air-assisted, or non-assisted.

(3) Flares shall be operated at all times when emissions may be vented to them.

(4) Flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours. Test Method 22 in appendix A of part 60 of this chapter shall be used to determine the compliance of flares with the visible emission provisions of this part. The observation period is 2 hours and shall be used according to Method 22.

(5) Flares shall be operated with a flame present at all times. The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(6) An owner/operator has the choice of adhering to the heat content specifications in paragraph (b)(6)(ii) of this section, and the maximum tip velocity specifications in paragraph (b)(7) or (b)(8) of this section, or adhering to the requirements in paragraph (b)(6)(i) of this section.

(i)

(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume) or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity V_{max}, as determined by the following equation:

$V_{max} = (X_{H2} - K_1) * K_2$

Where:

V_{max} = Maximum permitted velocity, m/sec.

K_1 = Constant, 6.0 volume-percent hydrogen.

K_2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

X_{H2} = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in §63.14).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (b)(7)(i) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted at 7.45 M/scm (200 Btu/scf) or greater if the flares is non-assisted. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

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Where:

H_T = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C.

K = Constant =

$$1.740 \times 10^{-7} \left(\frac{1}{ppmv}\right)\left(\frac{g\text{-mole}}{scm}\right)\left(\frac{MJ}{kcal}\right)$$

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where the standard temperature for (g-mole/scm) is 20 °C.

C_i = Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).

H_i = Net heat of combustion of sample component i, kcal/g-mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.

n = Number of sample components.

(7)

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (b)(7)(ii) and (b)(7)(iii) of this section. The actual exit velocity of a flare shall be determined by dividing by the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by Test Method 2, 2A, 2C, or 2D in appendix A to 40 CFR part 60 of this chapter, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec), are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the method specified in paragraph (b)(7)(i) of this section, less than the velocity V_{max}, as determined by the method specified in this paragraph, but less than 122 m/sec (400 ft/sec) are allowed. The maximum permitted velocity, V_{max}, for flares complying with this paragraph shall be determined by the following equation:

$Log_{10}(V_{max}) = (H_T + 28.8)/31.7$

Where:

V_{max} = Maximum permitted velocity, m/sec.

28.8 = Constant.

31.7 = Constant.

H_T = The net heating value as determined in paragraph (b)(6) of this section.

(8) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity V_{max}. The maximum permitted velocity, V_{max}, for air-assisted flares shall be determined by the following equation:

$V_{max} = 8.71 + 0.708(H_T)$

Where:

V_{max} = Maximum permitted velocity, m/sec.

8.71 = Constant.

0.708 = Constant.

H_T = The net heating value as determined in paragraph (b)(6)(ii) of this section.

(c) *Alternative work practice for monitoring equipment for leaks.* Paragraphs (c), (d), and (e) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, sppendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (c), (d), and (e) of this section continue to apply. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (c)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (c), (d), and (e) of this section.

(1) *Applicable subpart* means the subpart in 40 CFR parts 60, 61, 63, and 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.
(2) *Equipment* means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.
(3) *Imaging* means making visible emissions that may otherwise be invisible to the naked eye.
(4) *Optical gas imaging instrument* means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.
(5) *Repair* means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.
(6) *Leak* means:
  (i) Any emissions imaged by the optical gas instrument;
  (ii) Indications of liquids dripping;
  (iii) Indications by a sensor that a seal or barrier fluid system has failed; or
  (iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(d) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.
(1) An owner or operator of an affected source subject to 40 CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (e) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.
(2) Any leak detected when following the leak survey procedure in paragraph (e)(3) of this section must be identified for repair as required in the applicable subpart.
(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subparts to which the equipment is subject.
(4) The schedule for repair is as required in the applicable subpart.
(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.
(6) When this alternative work practice is used for detecting leaking equipment, the following are not applicable for the equipment being monitored:
  (i) Skip period leak detection and repair;
  (ii) Quality improvement plans; or
  (iii) Complying with standards for allowable percentage of valves and pumps to leak.
(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (d)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, Appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12

months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(e) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (e)(1) through (e)(5) of this section.

(1) *Instrument specifications.* The optical gas imaging instrument must comply with the requirements specified in paragraphs (e)(1)(i) and (e)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (e)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) *Daily instrument check.* On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (e)(2)(i) of this section in accordance with the procedure specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (e)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (e)(2)(i)(A) and (e)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (e)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$E_{dic} = (E_{sds}) \sum_{i=1}^{k} x_i$$

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Where:

E_{dic} = Mass flow rate for the daily instrument check, grams per hour

x_i = Mass fraction of detectable chemical(s) i seen by the optical gas imaging instrument, within the distance to be used in paragraph (e)(2)(iv)(B) of this section, at or below the standard detection sensitivity level, E_{sds}.

E_{sds} = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

k = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate calculated in paragraph (e)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (e)(2)(ii) through (e)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under §63.177 or §63.178, whichever is applicable.

(3) *Leak survey procedure.* Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) *Recordkeeping.* Keep the records described in paragraphs (e)(4)(i) through (e)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (e)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (e)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (e)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (e)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) *Recordkeeping requirements in the applicable subpart.* A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by

Method 21, the time and date of the screening, and calibration information required in the existing applicable subparts.

(5) *Reporting.* Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to *CCG-AWP@EPA.GOV.*

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 24444, May 4, 1998; 65 FR 62215, Oct. 17, 2000; 67 FR 16605, Apr. 5, 2002; 73 FR 78211, Dec. 22, 2008]

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§63.12 State authority and delegations.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from—

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b)

(1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate state agency of any state to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain federal or state reporting requirement. Any information required to be submitted electronically by this part via the EPA's CEDRI may, at the discretion of the delegated authority, satisfy the requirements of this paragraph. The Administrator may permit all or some of the information to be submitted to the appropriate state agency only, instead of to the EPA and the state agency with the exception of federal electronic reporting requirements under this part. Sources may not be exempted from federal electronic reporting requirements.

[59 FR 12430, Mar. 16, 1994, as amended at 85 FR 73887, Nov. 19, 2020]

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§63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following table. If a request, report, application, submittal, or

other communication is required by this part to be submitted electronically via the EPA's CEDRI then such submission satisfies the requirements of this paragraph (a).

Table 1 to Paragraph (a)

Region	Address	State
I	Director, Enforcement and Compliance Assurance Division, U.S. EPA Region I, 5 Post Office Square—Suite 100 (04-2), Boston, MA 02109-3912, Attn: Air Compliance Clerk	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont.
II	Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278	New Jersey, New York, Puerto Rico, Virgin Islands.
III	Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia.
IV	Director, Air and Radiation Division, 61 Forsyth Street, SW, Atlanta, Georgia 30303-8960	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee.
V	Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507	Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin.
VI	Director; Enforcement and Compliance Assurance Division; U.S. Environmental Protection Agency, 1201 Elm Street, Suite 500, Mail Code 6ECD, Dallas, Texas 75270-2102	Arkansas, Louisiana, New Mexico, Oklahoma, Texas.
VII	Director, Air and Waste Management Division, 11201 Renner Boulevard, Lenexa, Kansas 66219	Iowa, Kansas, Missouri, Nebraska.
VIII	Director, Air and Toxics Technical Enforcement Program, Office of Enforcement, Compliance and Environmental Justice, Mail Code 8ENF-AT, 1595 Wynkoop Street, Denver, CO 80202-1129	Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming.
IX	Director, Air Division, 75 Hawthorne Street, San Francisco, CA 94105	Arizona, California, Hawaii, Nevada; the territories of American Samoa and Guam; the Commonwealth of the Northern Mariana Islands; the territories of Baker Island, Howland Island, Jarvis Island, Johnston Atoll, Kingman Reef, Midway Atoll, Palmyra Atoll, and Wake Islands; and certain U.S. Government activities in the freely associated states of the Republic of the Marshall Islands, the Federated States of Micronesia, and the Republic of Palau.

X	Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101	Alaska, Idaho, Oregon, Washington.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998; 67 FR 4184, Jan. 29, 2002; 68 FR 32601, May 30, 2003; 68 FR 35792, June 17, 2003; 73 FR 24871, May 6, 2008; 75 FR 69532, Nov. 12, 2010; 76 FR 49673, Aug. 11, 2011; 78 FR 37977, June 25, 2013]; 84 FR 34069, July 17, 2019; 84 FR 44230, Aug. 23, 2019; 85 FR 73887, Nov. 19, 2020; 89 FR 86748, Oct. 31, 2024

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§63.14 Incorporations by reference.

(a)

(1) Certain material is incorporated by reference into this part with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. To enforce any edition other than that specified in this section, the U.S. Environmental Protection Agency (EPA) must publish a document in the Federal Register and the material must be available to the public. All approved incorporation by reference (IBR) material is available for inspection at the EPA and at the National Archives and Records Administration (NARA). Contact the EPA at: EPA Docket Center, Public Reading Room, EPA WJC West, Room 3334, 1301 Constitution Ave. NW, Washington, DC; phone: (202) 566-1744. For information on the availability of this material at NARA, visit *www.archives.gov/federal-register/cfr/ibr-locations* or email *fr.inspection@nara.gov*.

(2) The IBR material may be obtained from the sources in the following paragraphs of this section or from one or more private resellers listed in this paragraph (a)(2). For material that is no longer commercially available, contact: the EPA (see paragraph (a)(1) of this section).

(i) Accuris Standards Store, 321 Inverness Drive, South Englewood, CO, 80112; phone: (800) 332-6077; website: *https://store.accuristech.com*.

(ii) (ii) American National Standards Institute (ANSI), 25 West 43rd Street, Fourth Floor, New York, NY 10036-7417; phone: (212) 642-4980; email: *info@ansi.org*; website: *www.ansi.org*.

(iii) (iii) GlobalSpec, 257 Fuller Road, Suite NFE 1100, Albany, NY 12203-3621; phone: (800) 261-2052; website: *https://standards.globalspec.com*.

(iv) (iv) Nimonik Document Center, 401 Roland Way, Suite 224, Oakland, CA, 94624; phone (650) 591-7600; email: *info@document-center.com*; website: *www.document-center.com*.

(v) Techstreet, phone: (855) 999-9870; email: *store@techstreet.com*; website: *www.techstreet.com*.

(b) American Conference of Governmental Industrial Hygienists (ACGIH), Customer Service Department, 1330 Kemper Meadow Drive, Cincinnati, Ohio 45240, telephone number (513) 742-2020.

(1) Industrial Ventilation: A Manual of Recommended Practice, 22nd Edition, 1995, Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure." IBR approved for §§ 63.843(b) and 63.844(b).
(2) Industrial Ventilation: A Manual of Recommended Practice, 23rd Edition, 1998, Chapter 3, "Local Exhaust Hoods" and Chapter 5, "Exhaust System Design Procedure." IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).
(3) Industrial Ventilation: A Manual of Recommended Practice for Design, 27th Edition, 2010. IBR approved for §§ 63.1503, 63.1506(c), 63.1512(e), Table 2 to subpart RRR, Table 3 to subpart RRR, and appendix A to subpart RRR, and § 63.2984(e).

(c) American Petroleum Institute (API), 200 Massachusetts Ave. NW, Suite 1100, Washington, DC 20001; phone: (202) 682-8000; website: *www.api.org*.
(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989; IBR approved for §§ 63.111; 63.1402; 63.2406; 63.7944.
(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991; IBR approved for § 63.150(g).
(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2 (API MPMS 19.2), Evaporative Loss From Floating-Roof Tanks, First Edition, April 1997; IBR approved for §§ 63.1251; 63.12005.
(4) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2 (API MPMS 19.2), Evaporative Loss From Floating-Roof Tanks, Fourth Edition, August 2020; IBR approved for § 63.101(b).

(d) American Public Health Association, 1015 18th Street NW, Washington, DC 20036; phone (844) 232-3707; email: *standardmethods@subscritpionoffice.com*; website: *www.standardmethods.org*.
(1) Standard Method 5210, Biochemical Oxygen Demand (BOD), revised December 10, 2019; IBR approved for § 63.457(c)
(2) [Reserved]

(e) American Society of Heating, Refrigerating, and Air-Conditioning Engineers at 1791 Tullie Circle, NE., Atlanta, GA 30329 *orders@ashrae.org*.

(1) American Society of Heating, Refrigerating, and Air-Conditioning Engineers Method 52.1, *Gravimetric and Dust-Spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter* June 4, 1992; IBR approved for § 63.11516(d).
(2) ANSI/ASHRAE Standard 52.2-2017, *Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size,* copyright 2017; IBR approved for § 63.11173(e).

(f) American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990; phone: (800) 843-2763; email: *CustomerCare@asme.org*; website: *www.asme.org*.
(1) ANSI/ASME PTC 19.10-1981, Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus], issued August 31, 1981; §§ 63.116(c) and (h); 63.128(a); 63.145(i); 63.309(k); 63.365(b); 63.457(k); 63.490(g); 63.772(e) and (h); 63.865(b); 63.997(e); 63.1282(d) and (g); 63.1450(a), (b), (d), (e), (g); 63.1625(b); table 5 to subpart EEEE; §§ 63.3166(a); 63.3360(e);

63.3545(a); 63.3555(a); 63.4166(a); 63.4362(a); 63.4766(a); 63.4965(a); 63.5160(d); table 4 to subpart UUUU; tables 5, 16, and 17 to subpart XXXX; table 3 to subpart YYYY; table 4 to subpart AAAAA; § 63.7322(b); table 5 to subpart DDDDD; §§ 63.7822(b); 63.7824(e); 63.7825(b); 63.8000(d); table 4 to subpart JJJJJ; table 4 to subpart KKKKK; §§ 63.9307(c); 63.9323(a); 63.9621(b) and (c); table 4 to subpart SSSSS; tables 4 and 5 of subpart UUUUU; table 1 to subpart ZZZZZ; §§ 63.11148(e); 63.11155(e); 63.11162(f); 63.11163(g); table 4 to subpart JJJJJJ; §§ 63.11410(j); 63.11551(a); 63.11646(a); 63.11945.

(2) [Reserved]

(g) The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida 33830.

(1) Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991:

(i) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for § 63.606(f), § 63.626(f).

(ii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method A—Volumetric Method, IBR approved for § 63.606(f), § 63.626(f).

(iii) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method B—Gravimetric Quimociac Method, IBR approved for § 63.606(f), § 63.626(f).

(iv) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method C—Spectrophotometric Method, IBR approved for § 63.606(f), § 63.626(f).

(v) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method A—Volumetric Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(vi) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method B—Gravimetric Quimociac Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(vii) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method C—Spectrophotometric Method, IBR approved for § 63.606(f), § 63.626(f), and (g).

(2) [Reserved]

(h) Association of Official Analytical Chemists (AOAC) International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.

(1) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(2) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(3) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(4) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(5) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(6) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).
(7) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for § 63.626(g).

(i) ASTM International, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-2959; phone: (800) 262-1373; website: *www.astm.org*.
(1) ASTM D95-05 (Reapproved 2010), Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation, approved May 1, 2010, IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.
(2) ASTM D240-09 Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, approved July 1, 2009, IBR approved for table 6 to subpart DDDDD.
(3) ASTM Method D388-05, Standard Classification of Coals by Rank, approved September 15, 2005, IBR approved for §§ 63.7575, 63.10042, and 63.11237.
(4) ASTM Method D396-10, Standard Specification for Fuel Oils, including Appendix X1, approved October 1, 2010, IBR approved for § 63.10042.
(5) ASTM D396-10, Standard Specification for Fuel Oils, approved October 1, 2010, IBR approved for §§ 63.7575 and 63.11237.
(6) ASTM D523-89, Standard Test Method for Specular Gloss, IBR approved for § 63.782.
(7) ASTM D975-11b, Standard Specification for Diesel Fuel Oils, approved December 1, 2011, IBR approved for § 63.7575.
(8) ASTM D1193-77, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.
(9) ASTM D1193-91, Standard Specification for Reagent Water, IBR approved for appendix A to part 63: Method 306, Sections 7.1.1 and 7.4.2.
(10) ASTM D1331-89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for appendix A to part 63: Method 306B, Sections 6.2, 11.1, and 12.2.2.
(11) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for appendix A to subpart II.
(12) ASTM D1475-13, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, approved November 1, 2013, IBR approved for §§ 63.3151(b), 63.3941(b) and (c), 63.3951(c), 63.4141(b) and (c), 63.4551(c), 63.4741(b) and (c), 63.4751(c), and 63.4941(b) and (c).
(13) ASTM Method D1835-05, Standard Specification for Liquefied Petroleum (LP) Gases, approved April 1, 2005, IBR approved for §§ 63.7575 and 63.11237.
(14) ASTM D1945-03 (Reapproved 2010), Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved January 1, 2010, IBR approved for §§ 63.670(j), 63.772(h), and 63.1282(g).
(15) ASTM D1945-14, Standard Test Method for Analysis of Natural Gas by Gas Chromatography, Approved November 1, 2014, IBR approved for § 63.670(j).
(16) ASTM D1946-77, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for § 63.11(b).
(17) ASTM D1946-90 (Reapproved 1994), Standard Method for Analysis of Reformed Gas by Gas Chromatography, 1994, IBR approved for §§ 63.11(b), 63.987(b), and 63.1412.

(18) ASTM D1963-85 (Reapproved 1996), Standard Test Method for Specific Gravity of Drying Oils, Varnishes, Resins, and Related Materials at 25/25 °C, approved November 29, 1985, IBR approved for § 63.3360(c).
(19) ASTM D2013/D2013M-09, Standard Practice for Preparing Coal Samples for Analysis, (Approved November 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.
(20) ASTM D2099-00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for § 63.5350.
(21) ASTM D2111-10 (Reapproved 2015), Standard Test Methods for Specific Gravity and Density of Halogenated Organic Solvents and Their Admixtures, approved June 1, 2015, IBR approved for §§ 63.3360(c), 63.3951(c), 63.4141(b) and (c), 63.4551(c), and 63.4741(a).
(22) ASTM D2216-05, Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass, IBR approved for the definition of "Free organic liquids" in § 63.10692.
(23) ASTM D2234/D2234M-10, Standard Practice for Collection of a Gross Sample of Coal, approved January 1, 2010, IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.
(24) ASTM D2369-93, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.
(25) ASTM D2369-95, Standard Test Method for Volatile Content of Coatings, IBR approved for appendix A to subpart II.
(26) ASTM D2369-10 (Reapproved 2015)e1, Standard Test Method for Volatile Content of Coatings, approved June 1, 2015, IBR approved for §§ 63.3151(a), 63.3360(c), 63.3961(j), 63.4141(a) and (b), 63.4161(h), 63.4321(e), 63.4341(e), 63.4351(d), 63.4541(a), and 63.4561(j), appendix A to subpart PPPP, and §§ 63.4741(a), 63.4941(a) and (b), 63.4961(j), and 63.8055(b).
(27) ASTM D2382-76, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b).
(28) ASTM D2382-88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b).
(29) ASTM D2697-86 (Reapproved 1998), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, IBR approved for §§ 63.3521(b), and 63.5160(c).
(30) ASTM D2697-03 (Reapproved 2014), Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings, approved July 1, 2014, IBR approved for §§ 63.3161(f), 63.3360(c), 63.3941(b), 63.4141(b), 63.4741(a) and (b), 63.4941(b), and 63.8055(b).
(31) ASTM D2879-83, Standard Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, Approved November 28, 1983, IBR approved for §§ 63.111, 63.1402, 63.2406, 63.7944, and 63.12005.
(32) ASTM D2879-96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, (Approved 1996), IBR approved for §§ 63.111, and 63.12005.
(33) ASTM D2879-23, Standard Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, approved December 1, 2023; IBR approved for § 63.101(b).

(34) ASTM D2908-74, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved June 27, 1974, IBR approved for § 63.1329(c).
(35) ASTM D2908-91, Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for § 63.1329(c).
(36) ASTM D2908-91(Reapproved 2001), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 15, 1991, IBR approved for § 63.1329(c).
(37) ASTM D2908-91(Reapproved 2005), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved December 1, 2005, IBR approved for § 63.1329(c).
(38) ASTM D2908-91(Reapproved 2011), Standard Practice for Measuring Volatile Organic Matter in Water by Aqueous-Injection Gas Chromatography, Approved May 1, 2011, IBR approved for § 63.1329(c).
(39) ASTM D2986-95A, "Standard Practice for Evaluation of Air Assay Media by the Monodisperse DOP (Dioctyl Phthalate) Smoke Test," approved September 10, 1995, IBR approved for section 7.1.1 of Method 315 in appendix A to this part.
(40) ASTM D3173-03 (Reapproved 2008), Standard Test Method for Moisture in the Analysis Sample of Coal and Coke, (Approved February 1, 2008), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.
(41) STM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for § 63.786(b).
(42) ASTM D3370-76, Standard Practices for Sampling Water, Approved August 27, 1976, IBR approved for § 63.1329(c).
(43) ASTM D3370-95a, Standard Practices for Sampling Water from Closed Conduits, Approved September 10, 1995, IBR approved for § 63.1329(c).
(44) ASTM D3370-07, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2007, IBR approved for § 63.1329(c).
(45) ASTM D3370-08, Standard Practices for Sampling Water from Closed Conduits, Approved October 1, 2008, IBR approved for § 63.1329(c).
(46) ASTM D3370-10, Standard Practices for Sampling Water from Closed Conduits, Approved December 1, 2010, IBR approved for § 63.1329(c).
(47) ASTM D3588-98 (Reapproved 2003), Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels, (Approved May 10, 2003), IBR approved for §§ 63.772(h) and 63.1282(g).
(48) ASTM D3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for § 63.365(e).
(49) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for appendix A to subpart II.
(50) ASTM D3912-80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(51) ASTM D3960-98, Standard Practice for Determining Volatile Organic Compound (VOC) Content of Paints and Related Coatings, approved November 10, 1998, IBR approved for §§ 63.3360(c) and 63.8055(b).
(52) ASTM D4006-11, Standard Test Method for Water in Crude Oil by Distillation, including Annex A1 and Appendix X1, (Approved June 1, 2011), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.
(53) ASTM D4006-11, Standard Test Method for Water in Crude Oil by Distillation, including Annex A1 and Appendix X1, (Approved June 1, 2011), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.
(54) ASTM D4017-81, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.
(55) ASTM D4017-90, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for appendix A to subpart II.
(56) ASTM D4057-06 (Reapproved 2011), Standard Practice for Manual Sampling of Petroleum and Petroleum Products, including Annex A1, (Approved June 1, 2011), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.
(57) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for § 63.782.
(58) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for § 63.782.
(59) ASTM D4177-95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, including Annexes A1 through A6 and Appendices X1 and X2, (Approved May 1, 2010), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.ASTM D4177-95 (Reapproved 2010), Standard Practice for Automatic Sampling of Petroleum and Petroleum Products, including Annexes A1 through A6 and Appendices X1 and X2, (Approved May 1, 2010), IBR approved for § 63.10005(i) and table 6 to subpart DDDDD.
(60) ASTM D4208-02 (Reapproved 2007), Standard Test Method for Total Chlorine in Coal by the Oxygen Bomb Combustion/Ion Selective Electrode Method, approved May 1, 2007, IBR approved for table 6 to subpart DDDDD.
(61) ASTM D4239-14e1, “Standard Test Method for Sulfur in the Analysis Sample of Coal and Coke Using High-Temperature Tube Furnace Combustion,” approved March 1, 2014, IBR approved for § 63.849(f).
(62) ASTM D4256-89, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.
(63) ASTM D4256-89 (Reapproved 94), Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.
(64) ASTM D4282-15, Standard Test Method for Determination of Free Cyanide in Water and Wastewater by Microdiffusion, Approved July 15, 2015, IBR approved for § 63.1103(g).
(65) ASTM D4606-03 (Reapproved 2007), Standard Test Method for Determination of Arsenic and Selenium in Coal by the Hydride Generation/Atomic Absorption Method, (Approved October 1, 2007), IBR approved for table 6 to subpart DDDDD.
(66) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for § 63.11(b).

(67) ASTM D4840-99 (Reapproved 2018)e, Standard Guide for Sampling Chain-of-Custody Procedures, approved August 15, 2018, IBR approved for appendix A to part 63.
(68) ASTM D4891-89 (Reapproved 2006), Standard Test Method for Heating Value of Gases in Natural Gas Range by Stoichiometric Combustion, (Approved June 1, 2006), IBR approved for §§ 63.772(h) and 63.1282(g).
(69) ASTM D5066-91 (Reapproved 2017), Standard Test Method for Determination of the Transfer Efficiency Under Production Conditions for Spray Application of Automotive Paints-Weight Basis, approved June 1, 2017, IBR approved for § 63.3161(g).
(70) ASTM D5087-02, Standard Test Method for Determining Amount of Volatile Organic Compound (VOC) Released from Solventborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), IBR approved for § 63.3165(e) and appendix A to subpart IIII.
(71) ASTM D5192-09, Standard Practice for Collection of Coal Samples from Core, (Approved June 1, 2009), IBR approved for table 6 to subpart DDDDD.
(72) ASTM D5198-09, Standard Practice for Nitric Acid Digestion of Solid Waste, (Approved February 1, 2009), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.
(73) ASTM D5228-92, Standard Test Method for Determination of Butane Working Capacity of Activated Carbon, (Reapproved 2005), IBR approved for § 63.11092(b).
(74) ASTM D5291-02, Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants, IBR approved for appendix A to subpart MMMM.
(75) ASTM D5790-95 (Reapproved 2012), Standard Test Method for Measurement of Purgeable Organic Compounds in Water by Capillary Column Gas Chromatography/Mass Spectrometry, Approved June 15, 2012, IBR approved for § 63.2485(h) and Table 4 to subpart UUUU.
(76) ASTM D5864-11, Standard Test Method for Determining Aerobic Aquatic Biodegradation of Lubricants or Their Components, (Approved March 1, 2011), IBR approved for table 6 to subpart DDDDD.
(77) ASTM D5865-10a, Standard Test Method for Gross Calorific Value of Coal and Coke, (Approved May 1, 2010), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.
(78) ASTM D5954-98 (Reapproved 2006), Test Method for Mercury Sampling and Measurement in Natural Gas by Atomic Absorption Spectroscopy, (Approved December 1, 2006), IBR approved for table 6 to subpart DDDDD.
(79) ASTM D5965-02 (Reapproved 2013), Standard Test Methods for Specific Gravity of Coating Powders, approved June 1, 2013, IBR approved for §§ 63.3151(b) and 63.3951(c).
(80) (ASTM D6053-00, Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes, IBR approved for appendix A to subpart MMMM.
(81) ASTM D6093-97 (Reapproved 2003), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, IBR approved for §§ 63.3521 and 63.5160(c).
(82) ASTM D6093-97 (Reapproved 2016), Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer, approved December 1,

2016, IBR approved for §§ 63.3161(f), 63.3360(c), 63.3941(b), 63.4141(b), 63.4741(a) and (b), and 63.4941(b).

(83) ASTM D6196-03 (Reapproved 2009), Standard Practice for Selection of Sorbents, Sampling, and Thermal Desorption Analysis Procedures for Volatile Organic Compounds in Air, Approved March 1, 2009, IBR approved for appendix A to this part: Method 325A and Method 325B.

(84) ASTM D6266-00a (Reapproved 2017), Standard Test Method for Determining the Amount of Volatile Organic Compound (VOC) Released from Waterborne Automotive Coatings and Available for Removal in a VOC Control Device (Abatement), approved July 1, 2017, IBR approved for § 63.3165(e).

(85) ASTM D6323-98 (Reapproved 2003), Standard Guide for Laboratory Subsampling of Media Related to Waste Management Activities, (Approved August 10, 2003), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(86) ASTM D6348-03, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2003, IBR approved for §§ 63.457(b), 63.997(e), and 63.1349, table 4 to subpart DDDD, table 5 to subpart EEEE, table 4 to subpart UUUU, table 4 subpart ZZZZ, and table 8 to subpart HHHHHHH.

(87) ASTM D6348-03 (Reapproved 2010), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, including Annexes A1 through A8, Approved October 1, 2010, IBR approved for §§ 63.1571(a), 63.4751(i), 63.4752(e), 63.4766(b), 63.7142(a) and (b), tables 4 and 5 to subpart JJJJJ, tables 4 and 6 to subpart KKKKK, tables 1, 2, and 5 to subpart UUUUU and appendix B to subpart UUUUU.

(88) ASTM D6348-12e1, Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §§ 63.997(e), 63.1571(a), and 63.2354(b), table 5 to subpart EEEE, table 4 to subpart UUUU, §§ 63.7142(a) and (b) and 63.8000(d), and table 4 to subpart SSSSS.

(89) ASTM D6348-12 (Reapproved 2020), Standard Test Method for Determination of Gaseous Compounds by Extractive Direct Interface Fourier Transform Infrared (FTIR) Spectroscopy, Approved February 1, 2012, IBR approved for §§ 63.109(a); 63.365(b); 63.509(a); 63.7322(d), (e), and (g); 63.7825(g) and (h); table 5 to subpart AAAAA.

(90) ASTM D6350-98 (Reapproved 2003), Standard Test Method for Mercury Sampling and Analysis in Natural Gas by Atomic Fluorescence Spectroscopy, (Approved May 10, 2003), IBR approved for table 6 to subpart DDDDD.

(91) ASTM D6357-11, Test Methods for Determination of Trace Elements in Coal, Coke, and Combustion Residues from Coal Utilization Processes by Inductively Coupled Plasma Atomic Emission Spectrometry, (Approved April 1, 2011), IBR approved for table 6 to subpart DDDDD.

(92) ASTM D6376-10, “Standard Test Method for Determination of Trace Metals in Petroleum Coke by Wavelength Dispersive X-Ray Fluorescence Spectroscopy,” Approved July 1, 2010, IBR approved for § 63.849(f).

(93) ASTM D6420-99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for §§ 63.5799 and 63.5850.

(94) ASTM D6420-99 (Reapproved 2004), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry (Approved October 1, 2004), IBR approved for §§ 63.457(b), 63.772(a), 63.772(e), 63.1282(a) and (d), and table 8 to subpart HHHHHHH.

(95) ASTM D6420-99 (Reapproved 2010), Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, Approved October 1, 2010, IBR approved for §§ 63.670(j); table 4 to subpart UUUU; 63.1450(f); 63.7142(b); appendix A to this part.

(96) ASTM D6420-18, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, approved November 1, 2018' IBR approved for §§ 63.101(b); 63.115(g); 63.116(c); 63.126(d); 63.128(a); 63.139(c); 63.145(d) and (j); 63.150(g); 63.180(d; 63.305(c); 63.482(b); 63.485(t); 63.488(b); 63.490(c) and (e); 63.496(b); 63.500(c); 63.501(a); 63.502(j); 63.503(a) and (g); 63.525(a) and (e); 63.987(b); 63.997(e); 63.2354(b); table 5 to subpart EEEE; §§ 63.2450(j); 63.8000(d).

(97) ASTM D6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for § 63.9307(c).

(98) ASTM D6522-00 (Reapproved 2005), Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, (Approved October 1, 2005), IBR approved for table 4 to subpart ZZZZ, table 5 to subpart DDDDDD, table 4 to subpart JJJJJJ, and §§ 63.772(e) and (h)) and 63.1282(d) and (g).

(99) ASTM D6522-11 Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas-Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, Approved December 1, 2011, IBR approved for § 63.1961(a) and table 3 to subpart YYYY.

(100) ASTM D6721-01 (Reapproved 2006), Standard Test Method for Determination of Chlorine in Coal by Oxidative Hydrolysis Microcoulometry, (Approved April 1, 2006), IBR approved for table 6 to subpart DDDDD.

(101) ASTM D6722-01 (Reapproved 2006), Standard Test Method for Total Mercury in Coal and Coal Combustion Residues by the Direct Combustion Analysis, (Approved April 1, 2006), IBR approved for Table 6 to subpart DDDDD and Table 5 to subpart JJJJJJ.

(102) ASTM D6735-01 (Reapproved 2009), Standard Test Method for Measurement of Gaseous Chlorides and Fluorides from Mineral Calcining Exhaust Sources—Impinger Method, IBR approved for § 63.7142(b), tables 4 and 5 to subpart JJJJJ, and tables 4 and 6 to subpart KKKKK.

(103) ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels, (Approved July 15, 2011), IBR approved for §§ 63.7575 and 63.11237.

(104) ASTM D6784-02 (Reapproved 2008), Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved April 1, 2008; IBR approved for §§ 63.2465(d); 63.11646(a); 63.11647(a) and (d); tables 1, 2, 5, 11, 12t, and 13 to subpart DDDDD; tables 4 and 5 to subpart JJJJJ; tables 4 and 6 to subpart KKKKK; table 4 to subpart JJJJJJ.

(105) ASTM D6784-16, Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method), Approved March 1, 2016; IBR approved for §§ 63.1450(d); 63.9621; table 5 to subpart AAAAA; table 17 to subpart XXXX; table 5 to subpart UUUUU; appendix A to subpart UUUUU.

(106) ASTM D6883-04, Standard Practice for Manual Sampling of Stationary Coal from Railroad Cars, Barges, Trucks, or Stockpiles, (Approved June 1, 2004), IBR approved for table 6 to subpart DDDDD.

(107) ASTM D6886-18, Standard Test Method for Determination of the Weight Percent Individual Volatile Organic Compounds in Waterborne Air-Dry Coatings by Gas Chromatography, approved October 1, 2018, IBR approved for § 63.2354(c).

(108) ASTM D7237-18, Standard Test Method for Free Cyanide and Aquatic Free Cyanide with Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection, Approved December 1, 2018, IBR approved for § 63.1103(g).

(109) ASTM D7430-11ae1, Standard Practice for Mechanical Sampling of Coal, (Approved October 1, 2011), IBR approved for table 6 to subpart DDDDD.

(110) ASTM D7520-16, Standard Test Method for Determining the Opacity of a Plume in the Outdoor Ambient Atmosphere, approved April 1, 2016; IBR approved for §§ 63.1450(c), (e), and (g); 63.1453(h); 63.1625(b); table 3 to subpart LLLLL; §§ 63.7823(c) through (f), 63.7833(g); 63.11423(c).

(111) [Reserved]

(112) ASTM E145-94 (Reapproved 2001), Standard Specification for Gravity-Convection and Forced-Ventilation Ovens, IBR approved for appendix A to subpart PPPP.

(113) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for § 63.786(b).

(114) ASTM E260-91, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b) and 63.786(b).

(115) ASTM E260-96, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b) and 63.786(b).

(116) ASTM E515-95 (Reapproved 2000), Standard Test Method for Leaks Using Bubble Emission Techniques, IBR approved for § 63.425(i).

(117) ASTM E711-87 (Reapproved 2004), Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, (Approved August 28, 1987), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(118) ASTM E776-87 (Reapproved 2009), Standard Test Method for Forms of Chlorine in Refuse-Derived Fuel, (Approved July 1, 2009), IBR approved for table 6 to subpart DDDDD.

(119) ASTM E871-82 (Reapproved 2006), Standard Test Method for Moisture Analysis of Particulate Wood Fuels, (Approved November 1, 2006), IBR approved for table 6 to subpart DDDDD and table 5 to subpart JJJJJJ.

(120) ASTM UOP539-12, Refinery Gas Analysis by GC, Copyright 2012 (to UOP), IBR approved for § 63.670(j).

Note 2 to paragraph (i): Standards listed in this paragraph (i) may also be available from standards resellers including the Standards Store, *https://global.ihs.com*.

(j) Bay Area Air Quality Management District (BAAQMD), 939 Ellis Street, San Francisco, California 94109, *http://www.arb.ca.gov/DRDB/BA/CURHTML/ST/st30.pdf*.

(1) "BAAQMD Source Test Procedure ST-30—Static Pressure Integrity Test, Underground Storage Tanks," adopted November 30, 1983, and amended December 21, 1994, IBR approved for § 63.11120(a).
(2) [Reserved]

(k) British Standards Institute, 389 Chiswick High Road, London W4 4AL, United Kingdom.
(1) BS EN 1593:1999, Non-destructive Testing: Leak Testing - Bubble Emission Techniques, IBR approved for § 63.425(i).
(2) BS EN 14662-4:2005, Ambient air quality standard method for the measurement of benzene concentrations—Part 4: Diffusive sampling followed by thermal desorption and gas chromatography, Published June 27, 2005, IBR approved for appendix A to this part: Method 325A and Method 325B.

(l) California Air Resources Board (CARB), 1001 I Street, P.O. Box 2815, Sacramento, CA 95812-2815, Telephone (916) 327-0900, *http://www.arb.ca.gov/*.
(1) Method 310, "Determination of Volatile Organic Compounds (VOC) in Consumer Products and Reactive Organic Compounds (ROC) in Aerosol Coating Products," amended May 25, 2018, IBR approved for § 63.8055(b).
(2) Method 428, "Determination Of Polychlorinated Dibenzo-P-Dioxin (PCDD), Polychlorinated Dibenzofuran (PCDF), and Polychlorinated Biphenyle Emissions from Stationary Sources," amended September 12, 1990, IBR approved for § 63.849(a)(13) and (14).
(3) Method 429, Determination of Polycyclic Aromatic Hydrocarbon (PAH) Emissions from Stationary Sources, Adopted September 12, 1989, Amended July 28, 1997, IBR approved for § 63.1625(b)
(4) California Air Resources Board Vapor Recovery Test Procedure TP-201.1 - "Volumetric Efficiency for Phase I Vapor Recovery Systems," adopted April 12, 1996, and amended February 1, 2001 and October 8, 2003, IBR approved for § 63.11120(b).
(5) California Air Resources Board Vapor Recovery Test Procedure TP-201.1E - "Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves," adopted October 8, 2003, IBR approved for § 63.11120(a)
(6) California Air Resources Board Vapor Recovery Test Procedure TP-201.3 - "Determination of 2-Inch WC Static Pressure Performance of Vapor Recovery Systems of Dispensing Facilities," adopted April 12, 1996 and amended March 17, 1999, IBR approved for § 63.11120(a).

(m) Composite Panel Association, 19465 Deerfield Avenue, Suite 306, Leesburg, VA 20176, Telephone (703)724-1128, and *www.compositepanel.org*.
(1) ANSI A135.4-2012, Basic Hardboard, approved June 8, 2012, IBR approved for § 63.4781.
(2) [Reserved]

(n) Environmental Protection Agency. Air and Radiation Docket and Information Center, 1200 Pennsylvania Avenue NW., Washington, DC 20460, telephone number (202) 566-1745.
(1) ***California Regulatory Requirements Applicable to the Air Toxics Program,*** November 16, 2010, IBR approved for § 63.99(a).
(2) New Jersey's *Toxic Catastrophe Prevention Act Program,* (July 20, 1998), IBR approved for § 63.99(a).
(3) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for § 63.99(a).

(4) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for § 63.99(a).
(5) Massachusetts Department of Environmental Protection regulations at 310 CMR 7.26(10)-(16), Air Pollution Control, effective as of September 5, 2008, corrected March 6, 2009, and 310 CMR 70.00, Environmental Results Program Certification, effective as of December 28, 2007. IBR approved for § 63.99(a).
(6)
  (i) New Hampshire Regulations at Env-Sw 2100, Management and Control of Asbestos Disposal Sites Not Operated after July 9, 1981, effective September 1, 2018, (including a letter from Robert R. Scott, Commissioner, Department of Environmental Services, State of New Hampshire, to David J. Alukonis, Director, Office of Legislative Services, dated October 23, 2018, certifying that the enclosed rule, Env-Sw 2100, is the official version of this rule), IBR approved for § 63.99(a).
  (ii) New Hampshire Code of Administrative Rules: Chapter Env-A 1800, Asbestos Management and Control, effective as of May 5, 2017 (certified with June 23, 2017 letter from Clark B. Freise, Assistant Commissioner, Department of Environmental Services, State of New Hampshire), as follows: Revision Notes #1 and #2; Part Env-A 1801-1807, excluding Env-A 1801.02(e), Env-A 1801.07, Env-A 1802.02, Env-A 1802.04, Env-A 1802.07-1802.09, Env-A 1802.13, Env-A 1802.15-1802.17, Env-A 1802.25, Env-A 1802.31, Env-A 1802.37, Env-A 1802.40, Env-A 1802.44, and Env-A 1803.05-1803.09; and Appendices B, C, and D; IBR approved for § 63.99(a).
(7) Maine Department of Environmental Protection regulations at Chapter 125, Perchloroethylene Dry Cleaner Regulation, effective as of June 2, 1991, last amended on June 24, 2009. IBR approved for §63.99(a).
(8) California South Coast Air Quality Management District's "Spray Equipment Transfer Efficiency Test Procedure for Equipment User, May 24, 1989," IBR approved for §§63.11173(e) and 63.11516(d).
(9) California South Coast Air Quality Management District's "Guidelines for Demonstrating Equivalency with District Approved Transfer Efficient Spray Guns, September 26, 2002," Revision 0, IBR approved for §§63.11173(e) and 63.11516(d).
(10) Rhode Island Department of Environmental Management regulations at Air Pollution Control Regulation No. 36, Control of Emissions from Organic Solvent Cleaning, effective April 8, 1996, last amended October 9, 2008, IBR approved for §63.99(a).
  (i) Rhode Island Air Pollution Control, General Definitions Regulation, effective July 19, 2007, last amended October 9, 2008. IBR approved for §63.99(a).
  (ii) Alaska Statute 42.45.045. Renewable energy grant fund and recommendation program, available at *http://www.legis.state.ak.us/basis/folio.asp*, IBR approved for §63.6675.
(11) [Reserved]
(12) Alaska Statute 42.45.045. Renewable energy grant fund and recommendation program, available at *http://www.legis.state.ak.us/basis/folio.asp*, IBR approved for § 63.6675.
(13) Vermont Air Pollution Control Regulations, Chapter 5, Air Pollution Control, section 5-253.11, Perchloroethylene Dry Cleaning, effective as of December 15, 2016. Incorporation by reference approved for § 63.99(a).

(o) U.S. Environmental Protection Agency (EPA), 1200 Pennsylvania Avenue NW, Washington, DC 20460; phone: (202) 272-0167; website: *www.epa.gov/aboutepa/forms/contact-epa*.

(1) EPA/100/R-10/005, Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds, December 2010; IBR approved for §§ 63.1450(f); 63.1459; table 2 to subpart QQQ; table 1 to subpart AAAAA. (Available at *https://www.epa.gov/sites/default/files/2013-09/documents/tefs-for-dioxin-epa-00-r-10-005-final.pdf*.)

(2) EPA-453/R-01-005, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Integrated Iron and Steel Plants—Background Information for Proposed Standards, Final Report, January 2001; IBR approved for § 63.7491(g).

(3) EPA-454/B-08-002, Quality Assurance Handbook for Air Pollution Measurement Systems; Volume IV: Meteorological Measurements, Version 2.0 (Final), Issued March 2008; IBR approved for §§ 63.184(c); 63.7792(b).

(4) EPA-454/R-98-015, Fabric Filter Bag Leak Detection Guidance, September 1997; IBR approved for §§ 63.548(e); 63.864(e); 63.6012(c); 63.7525(j); 63.8450(e); 63.8600(e); 63.9632(a); 63.9804(f); 63.11224(f); 63.11423(e). (Available at: https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=2000D5T6.pdf).

(5) EPA-454/R-99-005, Office of Air Quality Planning and Standards (OAQPS), Meteorological Monitoring Guidance for Regulatory Modeling Applications, February 2000; IBR approved for appendix A to this part.

(6) EPA/600/R-12/531, EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards, May 2012; IBR approved for § 63.2163(b).

(7) EPA-625/3-89-016, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-Dioxins and -Dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989; IBR approved for § 63.1513(d).

(8) EPA-821-R-02-019, Method 1631 Revision E, Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Absorption Fluorescence Spectrometry, Revision E, August 2002; IBR approved for table 6 to subpart DDDDD.

(9) EPA Method 200.8, Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma—Mass Spectrometry, Revision 5.4, 1994; IBR approved for table 6 to subpart DDDDD.

(10) In EPA Publication No. SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (Available from: www.epa.gov/hw-sw846/sw-846-compendium):

(i) SW-846-0011, Sampling for Selected Aldehyde and Ketone Emissions from Stationary Sources, Revision 0, December 1996; IBR approved for table 4 to subpart DDDD.

(ii) SW-846-3020A, Acid Digestion of Aqueous Samples And Extracts For Total Metals For Analysis By GFAA Spectroscopy, Revision 1, July 1992; IBR approved for table 6 to subpart DDDDD; table 5 to subpart JJJJJJ.

(iii) SW-846-3050B, Acid Digestion of Sediments, Sludges, and Soils, Revision 2, December 1996; IBR approved for table 6 to subpart DDDDD; table 5 to subpart JJJJJJ.

(iv) SW-846-5030B, Purge-And-Trap For Aqueous Samples, Revision 2, December 1996; IBR approved for §§ 63.109(b), (c), (d), and (e); 63.509(b) and (c); 63.2492(b) and (c).

(v) SW-846-5031, Volatile, Nonpurgeable, Water-Soluble Compounds by Azeotropic Distillation, Revision 0, December 1996; IBR approved for §§ 63.109(b), (c), (d), and (e); 63.509(b) and (c); 63.2492(b) and (c).
(vi) SW-846-7470A, Mercury In Liquid Waste (Manual Cold-Vapor Technique), Revision 1, September 1994; IBR approved for table 6 to subpart DDDDD; table 5 to subpart JJJJJJ.
(vii) SW-846-7471B, Mercury In Solid Or Semisolid Waste (Manual Cold-Vapor Technique), Revision 2, February 2007; IBR approved for table 6 to subpart DDDDD; table 5 to subpart JJJJJJ.
(viii)SW-846-8015C, Nonhalogenated Organics by Gas Chromatography, Revision 3, February 2007; IBR approved for §§ 63.11960; 63.11980; table 10 to subpart HHHHHHH.
(ix) SW-846-8260B, Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 2, December 1996; IBR approved for §§ 63.1107(a); 63.11960; 63.11980; table 10 to subpart HHHHHHH.
(x) SW-846-8260D, Volatile Organic Compounds By Gas Chromatography/Mass Spectrometry, Revision 4, June 2018; IBR approved for §§ 63.109(b), (c), (d), and (e); 63.509(b) and (c); 63.2492(b) and (c).
(xi) SW-846-8270D, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS), Revision 4, February 2007; IBR approved for §§ 63.1107(a); 63.11960; 63.11980; table 10 to subpart HHHHHHH.
(xii) SW-846-8315A, Determination of Carbonyl Compounds by High Performance Liquid Chromatography (HPLC), Revision 1, December 1996; IBR approved for §§ 63.11960; 63.11980; table 10 to subpart HHHHHHH.
(xiii)SW-846-5050, Bomb Preparation Method for Solid Waste, Revision 0, September 1994; IBR approved for table 6 to subpart DDDDD.
(xiv)SW-846-6010C, Inductively Coupled Plasma-Atomic Emission Spectrometry, Revision 3, February 2007; IBR approved for table 6 to subpart DDDDD.
(xv)SW-846-6020A, Inductively Coupled Plasma-Mass Spectrometry, Revision 1, February 2007; IBR approved for table 6 to subpart DDDDD.
(xvi)SW-846-7060A, Arsenic (Atomic Absorption, Furnace Technique), Revision 1, September 1994; IBR approved for table 6 to subpart DDDDD.
(xvii)SW-846-7740, Selenium (Atomic Absorption, Furnace Technique), Revision 0, September 1986; IBR approved for table 6 to subpart DDDDD.
(xviii)SW-846-9056, Determination of Inorganic Anions by Ion Chromatography, Revision 1, February 2007; IBR approved for table 6 to subpart DDDDD.
(xix)SW-846-9076, Test Method for Total Chlorine in New and Used Petroleum Products by Oxidative Combustion and Microcoulometry, Revision 0, September 1994; IBR approved for table 6 to subpart DDDDD.
(xx)SW-846-9250, Chloride (Colorimetric, Automated Ferricyanide AAI), Revision 0, September 1986; IBR approved for table 6 to subpart DDDDD.

(11)-(30)[Reserved]

(31) EPA/100/R-10/005, Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds, December 2010; IBR approved for § 63.1459 and table 2 to subpart QQQ. (Available at https://www.epa.gov/sites/default/files/2013-09/documents/tefs-for-dioxin-epa-00-r-10-005-final.pdf.)

(p) International Standards Organization (ISO), 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, + 41 22 749 01 11, *http://www.iso.org/iso/home.htm*.
  (1) ISO 6978-1:2003(E), Natural Gas—Determination of Mercury—Part 1: Sampling of Mercury by Chemisorption on Iodine, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.
  (2) ISO 6978-2:2003(E), Natural gas—Determination of Mercury—Part 2: Sampling of Mercury by Amalgamation on Gold/Platinum Alloy, First edition, October 15, 2003, IBR approved for table 6 to subpart DDDDD.
  (3) ISO 16017-2:2003(E): Indoor, ambient and workplace air—sampling and analysis of volatile organic compounds by sorbent tube/thermal desorption/capillary gas chromatography—Part 2: Diffusive sampling, May 15, 2003, IBR approved for appendix A to this part: Method 325A and Method 325B.

(q) National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P.O. Box 133318, Research Triangle Park, NC 27709-3318 or at *http://www.ncasi.org*.
  (1) NCASI Method DI/MEOH-94.03, Methanol in Process Liquids and Wastewaters by GC/FID, Issued May 2000, IBR approved for §§ 63.457 and 63.459.
  (2) NCASI Method CI/WP-98.01, Chilled Impinger Method For Use At Wood Products Mills to Measure Formaldehyde, Methanol, and Phenol, 1998, Methods Manual, IBR approved for table 4 to subpart DDDD.
  (3) NCASI Method DI/HAPS-99.01, Selected HAPs In Condensates by GC/FID, Issued February 2000, IBR approved for § 63.459(b).
  (4) NCASI Method IM/CAN/WP-99.02, Impinger/Canister Source Sampling Method for Selected HAPs and Other Compounds at Wood Products Facilities, January 2004, Methods Manual, IBR approved for table 4 to subpart DDDD.
  (5) NCASI Method ISS/FP A105.01, Impinger Source Sampling Method for Selected Aldehydes, Ketones, and Polar Compounds, December 2005, Methods Manual, IBR approved for table 4 to subpart DDDD and §§ 63.4751(i) and 63.4752(e).

(r) National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161, (703) 605-6000 or (800) 553-6847; or for purchase from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, (202) 512-1800.
  (1) Handbook 44, Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for § 63.1303(e).
  (2) "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, Third Edition. (A suffix of "A" in the method number indicates revision one (the method has been revised once). A suffix of "B" in the method number indicates revision two (the method has been revised twice).
    (i) Method 0023A, "Sampling Method for Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofuran Emissions from Stationary Sources," Revision 2, dated August 2018, IBR approved for § 63.1208(b).
    (ii) Method 9071B, "n-Hexane Extractable Material (HEM) for Sludge, Sediment, and Solid Samples," dated April 1998, IBR approved for § 63.7824(e).
    (iii) Method 9095A, "Paint Filter Liquids Test," dated December 1996, IBR approved for §§ 63.7700(b) and 63.7765.

(iv) Method 9095B, "Paint Filter Liquids Test," (revision 2), dated November 2004, IBR approved for the definition of "Free organic liquids" in §§ 63.10692, 63.10885(a), and the definition of "Free liquids" in § 63.10906.

(v) SW-846 74741B, Revision 2, "Mercury in Solid or Semisolid Waste (Manual Cold-Vapor Technique)," February 2007, IBR approved for § 63.11647(f).

(3) National Institute of Occupational Safety and Health (NIOSH) test method compendium, "NIOSH Manual of Analytical Methods," NIOSH publication no. 94-113, Fourth Edition, August 15, 1994.

(i) NIOSH Method 2010, "Amines, Aliphatic," Issue 2, August 15, 1994, IBR approved for § 63.7732(g).

(ii) [Reserved]

(s) North American Electric Reliability Corporation, 1325 G Street, NW., Suite 600, Washington, DC 20005-3801, *http://www.nerc.com*, *http://www.nerc.com/files/EOP0002-3_1.pdf*.

(1) North American Electric Reliability Corporation Reliability Standard EOP-002-3, Capacity and Energy Emergencies, adopted August 5, 2010, IBR approved for § 63.6640(f).

(2) (2)[Reserved]

(t) Technical Association of the Pulp and Paper Industry (TAPPI), 15 Technology Parkway South, Norcross, GA 30092, (800) 332-8686, *http://www.tappi.org*.

(1) TAPPI T 266, Determination of Sodium, Calcium, Copper, Iron, and Manganese in Pulp and Paper by Atomic Absorption Spectroscopy (Reaffirmation of T 266 om-02), Draft No. 2, July 2006, IBR approved for table 6 to subpart DDDDD.

(2) [Reserved]

(u) Texas Commission on Environmental Quality (TCEQ) Library, Post Office Box 13087, Austin, Texas 78711-3087; phone: (512) 239-0028; email: *info@www.tceq.texas.gov*; website: *www.tceq.texas.gov*.

(1) "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources," Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, January 31, 2003; IBR approved for §§ 63.104(f) and (g); 63.654(c) and (g); 63.655(i); 63.1086(e); 63.1089; 63.2490(d); 63.2525(r); 63.11920. (Available from: *www.tceq.texas.gov/downloads/compliance/investigations/assistance/samplingappp.pdf*).

(2) [Reserved]

[79 FR 11277, Feb. 27, 2014]

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Editorial Note: For Federal Register citations affecting § 63.14, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov*.

§63.15 Availability of information and confidentiality.

(a) *Availability of information.*

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) *Confidentiality.*

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

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§63.16 Performance Track Provisions.

(a) Notwithstanding any other requirements in this part, an affected source at any major source or any area source at a Performance Track member facility, which is subject to regular periodic reporting under any subpart of this part, may submit such periodic reports at an interval that is twice the length of the regular period specified in the applicable subparts; provided, that for sources subject to permits under 40 CFR part 70 or 71 no interval so calculated for any report of the results of any required monitoring may be less frequent than once in every six months.

(b) Notwithstanding any other requirements in this part, the modifications of reporting requirements in paragraph (c) of this section apply to any major source at a Performance Track member facility which is subject to requirements under any of the subparts of this part and which has:

(1) Reduced its total HAP emissions to less than 25 tons per year;

(2) Reduced its emissions of each individual HAP to less than 10 tons per year; and

(3) Reduced emissions of all HAPs covered by each MACT standard to at least the level required for full compliance with the applicable emission standard.

(c) For affected sources at any area source at a Performance Track member facility and which meet the requirements of paragraph (b)(3) of this section, or for affected sources at any major source that meet the requirements of paragraph (b) of this section:

(1) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using add-on control technology, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is meeting the emission standard by continuing to use that control technology. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(2) If the emission standard to which the affected source is subject is based on add-on control technology, and the affected source complies by using pollution prevention, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions to levels at or below those required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(3) If the emission standard to which the affected source is subject is based on pollution prevention, and the affected source complies by using pollution prevention and reduces emissions by an additional 50 percent or greater than required by the applicable emission standard, then all required reporting elements in the periodic report may be met through an annual certification that the affected source is continuing to use pollution prevention to reduce HAP emissions by an additional 50 percent or greater than required by the applicable emission standard. The affected source must maintain records of all calculations that demonstrate the level of HAP emissions required by the emission standard as well as the level of HAP emissions achieved by the affected source. The affected source must continue to meet all relevant monitoring and recordkeeping requirements. The compliance certification must meet the requirements delineated in Clean Air Act section 114(a)(3).

(4) Notwithstanding the provisions of paragraphs (c)(1) through (3), of this section, for sources subject to permits under 40 CFR part 70 or 71, the results of any required monitoring and recordkeeping must be reported not less frequently than once in every six months

[69 FR 21753, Apr. 22, 2004]

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Table 1 to Subpart A of Part 63—Detection Sensitivity Levels (grams per hour)

Monitoring Frequency per Subpart[a]	Detection Sensitivity Level
Bi-Monthly	60
Semi-Quarterly	85
Monthly	100

[a] When this alternative work practice is used to identify leaking equipment, the owner or operator must choose one of the monitoring frequencies listed in this table, in lieu of the monitoring frequency specified in the applicable subpart. Bi-monthly means every other month. Semi-quarterly means twice per quarter. Monthly means once per month.

[73 FR 78213, Dec. 22, 2008]

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Attachment 5. NSPS Excess Emissions Summary Report

SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____
Company: _____
Emission Limitation: _____
Address: _____
Monitor Manufacturer: _____
Model No.: _____
Date of Latest CMS Certification or Audit: _____
Process Unit(s) Description: _____
Total source operating time in reporting period:[1] _____

Emission data summary[1]	**CMS performance summary**[1]
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown ..... ____ b. Control equipment problems ..... ____ c. Process problems ..... ____ d. Other known causes ..... ____ e. Unknown causes ..... ____ 2. Total duration of excess emissions ..... ____ 3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ %[2]	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions ..... ____ b. Non-Monitor equipment malfunctions ____ c. Quality assurance calibration ..... ____ d. Other known causes ..... ____ e. Unknown causes ..... ____ 2. Total CMS Downtime ..... ____ 3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ %[2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

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