

**EASTERN KERN AIR POLLUTION CONTROL DISTRICT**



**MAJOR SOURCE  
PERMIT TO OPERATE**

2700 "M" Street, Suite 302  
Bakersfield, CA 93301-2370  
Bakersfield: (661) 862-5250  
Field Office: (661) 823-9264

**Permittee:** Lehigh Southwest Cement Company

**Location:** 13573 E. Tehachapi Blvd.  
Tehachapi, California 93561

**Permit No:** 1147-V-2000

**Mailing Address:** 13573 E. Tehachapi Blvd.  
Tehachapi, California 93561

**Issuance Date:** Month xx, 2016

**Expiration Date:** Month xx, 2021

**Nature of Business:** Producer of Portland Cement

This permit is issued pursuant to, and is conditioned upon, compliance with provisions of the Eastern Kern Air Pollution Control District (District) Rules and Regulations as authorized by the California Health and Safety Code (CH&SC), Section 39002. This permit is subject to accuracy of all information submitted relating to the permit application and to conditions appended hereto. It is valid from date of issuance until date of expiration unless renewed and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it.

Pursuant to the Clean Air Act Amendments of 1990 (CAAA), all conditions of this permit are federally enforceable by United States Environmental Protection Agency (EPA) and District. Those provisions which are not required by the CAAA are considered to be District provisions and are not federally enforceable by U.S. EPA.

By:

Glen Stephens, P.E.  
Air Pollution Control Officer

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**General Permit Conditions**

In accordance with California Health and Safety Code, Sections 39002 and 42301.10 through 42301.12 and all applicable Eastern Kern Air Pollution Control District (District) Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
1.	<p><b><u>Inspections</u></b></p> <p>Inspections shall be made by the enforcement agency for the purpose of obtaining information necessary to determine whether air pollution sources are in compliance with applicable rules and regulations, including authority to require record keeping and to make inspections and conduct tests of air pollution sources.</p>	Reg. I, Rule 107
2.	<p><b><u>Stack Monitoring</u></b></p> <p>Upon the request of and as directed by the Control Officer, the owner shall provide, install, and operate continuous monitoring equipment on such operations as directed. The owner shall maintain, calibrate, and repair the equipment and shall keep the equipment operating at design capabilities.</p>	Reg. I, Rule 108
3.	<p><b><u>Source Sampling</u></b></p> <p>Upon the request of the Control Officer and as directed by him the owner of any source operation which emits or may emit air contaminants, for which emission limits have been established, shall provide the necessary and proper facilities for source sampling.</p> <p>The applicable test method, if not specified in the rule, shall be conducted in accordance with Title 40 CFR, Subpart 60, Appendix A - Reference Methods, except particulate matter (PM<sub>10</sub>) for compliance with Rule 210.1 requirements shall be conducted in accordance with Title 40 CFR, Subpart 51, Appendix M, Method 201 or 201A. Where no test method exists in the preceding references for a source type source sampling shall be conducted in accordance with California Air Resources Board (CARB) approved methods.</p>	Reg. I, Rule 108.1
4.	<p><b><u>Equipment Breakdown</u></b></p> <p>An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, no enforcement action may be taken provided the owner or operator demonstrates to the Control Officer that a breakdown condition exists and the proper requirements are met.</p>	Reg. I, Rule 111

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
5.	<p><b><u>Severability</u></b></p> <p>If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of this Regulation and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Eastern Kern Air Pollution Control Board that these Regulations would have been issued in any case had such invalid provision or provisions not been included.</p>	Reg. I, Rule 114
6.	<p><b><u>Conditional Approval</u></b></p> <p>The Control Officer shall issue an Authority to Construct or a Permit to Operate, subject to conditions to insure compliance of the operation of any article, machine, equipment or other contrivance within the standards of Rule 208 and 208.1, in which case the conditions shall be specified in writing. Commencing work under such Authority to Construct or operation under such Permit to Operate shall be deemed acceptance of all conditions so specified. The Control Officer shall issue an Authority to Construct or Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates the article, machine, equipment or other contrivance can be operated within the standards of Rule 208 and 208.1 under the revised conditions.</p>	Reg. II, Rule 209
7.	<p><b><u>Standards for Authority to Construct</u></b></p> <p>A. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:</p> <ol style="list-style-type: none"> <li>1) The Permittee has obtained all permits and approvals required by District Rules 201 and 210.1 (unless the change is exempt under District Rule 202);</li> <li>2) The change is not subject to any requirements under Title IV of the Clean Air Act;</li> <li>3) The change is not a Title I modification; and</li> <li>4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit.</li> </ol>	Reg. II, Rule 210.1 Section IV. D.3

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
7.	<p>B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change;</p> <p>C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;</p> <p>D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;</p> <p>E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and</p> <p>F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.</p>	
8.	<p><b><u>Prevention of Significant Deterioration (PSD)</u></b></p> <p>Facility may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modifications(s).</p>	Reg. II, Rule 210.4
9.	<p><b><u>Permit Fees</u></b></p> <p>Every applicant for an Authority to Construct or a Permit to Operate shall pay a filing fee. For issuance of an Authority to Construct, or an initial Permit to Operate, the applicant shall pay fees as prescribed in Rule 301. For issuance of an Authority to Construct, application processing fees shall also be paid as prescribed in Rule 303.</p> <p>Annually on the anniversary of issuance of a Permit to Operate, the permittee shall pay a renewal fee as prescribed in Rule 301. Fees collected pursuant to Rule 201.1, Section VIII.B. shall supplement applicable Rules 301 and 301.3 fee requirements.</p> <p><b><u>Payment of Supplemental Fee</u></b></p> <p>An owner or operator, or his designee, shall pay an annual supplemental fee for a permit to operate pursuant to Rule 201.1 as determined by the calculation method in Subsection VIII.B.3., to provide a District-wide fee rate of \$25 per ton of fee-based emissions (CPI-adjusted) for all facilities subject to Rule 201.1, unless Rule 201.1 VIII.B.2. applies.</p>	Reg. III, Rule 301          Rule 201.1 Section VIII.B.

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
10.	<p><b><u>Visible Emissions Limits</u></b></p> <p>A person shall not discharge into the atmosphere, from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:</p> <p>A. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or</p> <p>B. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A.</p>	Reg. IV, Rule 401
11.	<p><b><u>Particulate Matter Concentration - Desert Basin</u></b></p> <p>A. A person shall not discharge into the atmosphere from any single source operation, in service on the date this Rule is adopted, particulate matter in excess of 0.2 grains per cubic foot of gas at standard conditions.</p> <p>B. A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</p>	Reg. IV, Rule 404.1
12.	<p><b><u>Particulate Matter - Emission Rate</u></b></p> <p>A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.</p>	Reg. IV, Rule 405
13.	<p><b><u>Process Weight - Portland Cement Kilns</u></b></p> <p>Cement kilns, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter in excess of the Environmental Protection Agency Standards of Performance. Cement kilns regulated by this Rule are not subject to other process weight Rules.</p>	Reg. IV, Rule 406
14.	<p><b><u>Sulfur Compounds</u></b></p> <p>A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO<sub>2</sub>).</p>	Reg. IV, Rule 407

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
15.	<p><b><u>Fuel Burning Equipment - Combustion Contaminants</u></b></p> <p>A. Fuel burning equipment, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or nitrogen oxides in excess of the Environmental Protection Agency Standard of Performance.</p> <p>B. A person shall not discharge into the atmosphere from any other fuel burning equipment combustion contaminants exceeding in concentration at the point of discharge, 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO<sub>2</sub>) at standard conditions.</p>	Reg. IV, Rule 409
16.	<p><b><u>Organic Solvents</u></b></p> <p>A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).</p>	Reg. IV, Rule 410
17.	<p><b><u>Disposal and Evaporation of Solvents</u></b></p> <p>A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.</p>	Reg. IV, Rule 410.2
18.	<p><b><u>Storage of Organic Liquids</u></b></p> <p>A person shall not use equipment to store organic liquids and petroleum distillates with a true vapor pressure greater than 1.5 psia unless provisions are made for controlling organic vapors.</p>	Reg. IV, Rule 411
19.	<p><b><u>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</u></b></p> <p>A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.</p>	Reg. IV, Rule 412
20.	<p><b><u>Transfer of Gasoline into Vehicle Fuel Tanks</u></b></p> <p>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.</p>	Reg. IV, Rule 412.1



	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
21.	<p><b><u>Nuisance</u></b></p> <p>A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.</p>	Reg. IV, Rule 419
22.	<p><b><u>Federal New Source Performance Standards (NSPS)</u></b></p> <p>Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with standards, criteria and requirements set forth therein.</p> <p>All applicable requirements of 40 CFR Part 60, Subparts A, F, Y, OOO and IIII apply to this facility.</p>	Reg. IV, Rule 422
23.	<p><b><u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u></b></p> <p>Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.</p> <p>All applicable requirements of 40 CFR Part 61, Subpart M and 40 CFR Part 63, Subparts A, LLL, and ZZZZ apply to this facility.</p> <p>For the purposes of 40 CFR Part 63, Subpart LLL, “Significant Change” is defined as the use by the facility of a fuel or alternate raw material that is a Federally regulated hazardous waste. The normal use of District approved fuels and/or fuel blends and District approved raw materials or raw material blends does not constitute a “significant change” in operation of the facility.</p> <p>For the purposes of 40 CFR Part 63, Subpart ZZZZ, “Stationary Reciprocating Internal Combustion Engines” You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.</p>	Reg. IV, Rule 423

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
24.	<p><b><u>Compliance Certification</u></b></p> <p>The owner/operator shall comply with the following procedures for compliance certification:</p> <ul style="list-style-type: none"> <li>A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 60 days after end of compliance certification period;</li> <li>B. Compliance certification period shall begin April 1 of each year and end March 31 of the following year;</li> <li>C. Such compliance certification shall identify the basis for each permit term or condition, e.g., specify the emissions limitation, standard or work practice, and a means of monitoring compliance with the term or condition;</li> <li>D. Such compliance certification shall include compliance status and method(s) used to determine compliance for the current time period and over entire reporting period; and</li> <li>E. Such compliance certification shall include any additional inspection, monitoring or entry requirement promulgated pursuant to Sections 114(a) and 504(b) of the CAA.</li> </ul> <p>Any application form, report, or compliance certification submitted pursuant to these regulations shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.</p> <p>U.S. EPA's Mailing Address:                      Director, Air Division                      75 Hawthorne Street                      AIR-3                      San Francisco, CA 94105</p>	40 CFR 70.5d

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
25.	<p><b><u>Compliance with Permit Conditions</u></b></p> <p>A. Permittee shall comply with all permit conditions;</p> <p>B. Permit does not convey any property rights or any exclusive privilege;</p> <p>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</p> <p>D. Permittee shall not use “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition;</p> <p>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</p> <p>F. Within a reasonable time period, permittee shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</p>	Reg. II, Rule 201.1
26.	<p><b><u>Emergency Provisions</u></b></p> <p>A. The permittee shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. All District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;</p> <p>B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:</p> <ol style="list-style-type: none"> <li>1) An emergency occurred;</li> <li>2) The permittee can identify the cause(s) of the emergency;</li> <li>3) The facility was being properly operated at the time of the emergency;</li> <li>4) All steps were taken to minimize the emissions resulting from the emergency; and</li> <li>5) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken;</li> </ol> <p>C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.</p>	

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
27.	<p><b><u>Record Keeping</u></b></p> <p>A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not submitted by such permit streamlining requirement(s) or District-only rules, including:</p> <ol style="list-style-type: none"> <li>1) Date, place, and time of sampling;</li> <li>2) Operating conditions at time of sampling;</li> <li>3) Date, place, and method of analysis; and</li> <li>4) Results of analysis;</li> </ol> <p>B. Retention of records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application; and</p> <p>C. Any other record keeping deemed necessary by the APCO to ensure compliance with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.</p>	Reg. II, Rule 201.1
28.	<p><b><u>Reporting</u></b></p> <p>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with Rule 111;</p> <p>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO;</p> <p>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</p> <p>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</p> <ol style="list-style-type: none"> <li>1) Date when compliance will be achieved,</li> <li>2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and</li> <li>3) Log of any preventative or corrective action taken; and</li> </ol>	Reg. II, Rule 210.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
28.	<p><b><u>Reporting (continued)</u></b></p> <p>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</p>	
29.	<p><b><u>Referencing of District and Applicable Requirements</u></b></p> <p>Pursuant to Rule 201.1.VII.C. District hereby references the following documents which are clearly identified and available to the District and to the public:</p> <p>A. Plant modernization project; and</p> <p>B. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment.</p> <p>These files contain title, document number, applicant, and date received. Also included in these files are rule citations, engineering evaluations, and final documents all related to the existing permit conditions and emissions limits set forth in this permit.</p>	Reg. II, Rule 201.1
30.	<p><b><u>Right of Entry</u></b></p> <p>The source shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</p> <p>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;</p> <p>B. Inspection and duplication of records required by the permit to operate; and</p> <p>C. Source sampling or other monitoring activities.</p>	Reg. II, Rule 201.1
31.	<p><b><u>Permit Life</u></b></p> <p>The life of this permit shall be five years from the date of issuance.</p>	Reg. II, Rule 210.1 Section VI.B.15
32.	<p><b><u>Administrative Permit Amendment and Minor Permit Modification</u></b></p> <p>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.</p>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
33.	<p><b><u>Applicability of Federally Enforceable Conditions</u></b></p> <p>Federally Enforceable Conditions <b><u>do not apply</u></b> to the following permit sections: Equipment Descriptions, and any Design Conditions, Operational Conditions, Special Conditions, or Compliance Testing Requirements designated as District only. Federally Enforceable Conditions <b><u>shall apply</u></b> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits except as noted above.</p>	Reg. II, Rule 201.1
34.	<p><b><u>Periodic Monitoring</u></b></p> <p><b><u>Non-Point</u></b></p> <p>Lehigh Southwest Cement Company shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all non-point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source and that source is not operating under breakdown condition as defined in and allowed for in District Rule 111, Lehigh Southwest Cement Company shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard.</p> <p>NOTE: This requirement does not apply to fugitive emissions resulting from activities not covered by a permit to operate unless the source is subject to District Rule 210.1 (NSR) requirements.</p> <p><b><u>Point</u></b></p> <p>Lehigh Southwest Cement Company shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 111, Lehigh Southwest Cement Company shall conduct testing on that point source:</p> <p>A. Within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard. If compliance is not documented:</p>	Reg. II, Rule 210.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
34.	<p><b><u>Point (continued)</u></b></p> <p>B. Within 30 days of the Method 9 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of District Rules 404.1, 405, 406 and/or 210.1.</p>	
	<p><b><u>Additional Monitoring</u></b></p> <p>Diesel standby and emergency piston engines do not require opacity monitoring if utilizing California diesel or other low-sulfur, low aromatic fuel. Fuel records shall be kept for verification purposes and an operational log for hours of operation.</p> <p>All control equipment shall be inspected annually for proper operation. Lehigh Southwest Cement Company shall maintain all records of control equipment maintenance for a period of five years.</p> <p>Monitoring shall be the responsibility of the source; however, a visible emissions inspection or Method 9 conducted by a District inspector may be counted as meeting the requirement for the source to conduct same if the information and records generated by the inspector meets the requirements of the permit and a copy of the records are maintained by the source for a period of five years.</p> <p>Record keeping provisions associated with all monitoring requirements shall include the following information:</p> <p>A. Identification of stack or emission point being monitored;</p> <p>B. Operational conditions at the time of monitoring;</p> <p>C. Records of any monitoring conducted, including records of emission or operational parameter values and the date, place and time of sampling or measurement; and</p> <p>D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action.</p>	

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
34.	<p><b><u>Testing</u></b></p> <p>Lehigh Southwest Cement Company shall conduct stack testing annually and at other times as specified by U.S. EPA or the District, in accordance with the methodology outlined in EPA Methods 5-8, 7E, 10, 18 or equivalent, to verify compliance with emission limits and the accuracy of any continuous in-stack monitors. The District and U.S. EPA shall be notified at least 30 days in advance of the testing to allow an observer to be present and the report of results shall be transmitted to the District as soon as they are available. (PSD Permit #SE94-01 and District Rule 210.1)</p>	
	<p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Applies to EU 017) (Portland Cement Kilns - Oxides of Nitrogen)</p> <p>Continuous NO<sub>x</sub> emissions monitoring system records and clinker production records for the cement kiln shall be maintained at the facility for a period of at least five years and made readily available to District personnel.</p> <p>Oxides of nitrogen stack testing for purposes of this requirement shall be conducted using EPA Test Method 7E.</p> <p>Stack gas flow rate testing for purposes of this requirement shall be conducted using EPA Test Method 2.</p> <p>The following formula shall be used to convert uncorrected observed NO<sub>x</sub> concentration in ppm to tons per day at standard conditions of 68° F and a gas pressure of 29.92 inches of mercury:</p> $\frac{\text{Tons} \cdot \text{NO}_x}{\text{day}} = (\text{ppmv} \cdot \text{NO}_x) \times \left( \frac{46 \text{ grams}}{\text{mole}} \right) \times (1.56 \times 10^{-7}) \left( \frac{\text{dscf}}{\text{min}} \right) \times (0.0120)$ <p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Applies to EU 041) (Gasoline Storage - Phase I)</p> <p>A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 201.1 or 201.1a upon installation and as directed by the Air Pollution Control Officer;</p> <p>B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D-323-82 at storage temperature; and</p> <p>C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.</p>	Reg. IV, Rule 412



	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
34.	<p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Applies to EU 041) (Gasoline Storage &amp; Dispensing - Phase II)</p> <p>Verification that each CARB-certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in District Rule 412.1, Subsection V.C. shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing.</p> <p>Facility shall be pressure tested to determine proper installation and function before startup, and thereafter as directed by the Control Officer if not consistently operated leak-free or a major modification is implemented.</p> <p>Tests shall be conducted in accordance with test procedures found in CARB's "Test Procedures for Determination of the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".</p>	Reg. IV, Rule 412.1
35.	<p><b><u>Clean Air Act</u></b></p> <p>Should this stationary source, as defined in 40 C.F.R. section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 C.F.R. part 70 or 71.</p>	CAA Section 112(r)(7)
36.	<p><b><u>National Emission Standard for Asbestos</u></b></p> <p>Permittee shall comply with the requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.</p>	40 CFR 61, Subpart M
37.	<p><b><u>Protection of Stratospheric Ozone</u></b></p> <p>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.</p> <p>Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.</p> <p>Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.</p>	40 CFR Part 82

## **List of Insignificant Air Pollutant Emitting Equipment**

Space Heating Equipment

Welding Equipment

Portable IC Engines - California Registered

Small IC Engines < 50 bhp

Boilers & Heaters < 5 MM Btu/hr

Air Conditioning Equipment

Atomic Absorption

Bunsen Burners

Inductively Coupled Plasma

Steam Cleaners, Natural Gas

Water Heaters, Natural Gas

Motor Vehicles as Defined in the CH&SC

Spectro Photometer

Aboveground Fuel Oil Storage Tanks

Below Ground Diesel Storage Tanks

Small Degreasing Operations

Emission Unit 009 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	009	Bulk & Sack Cement Loadout Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Bulk & Sack Cement Loadout Operation, including following equipment:

- A. Twelve "A" Cement Storage Silos J6-401 through J6-412 ventilated to fabric collectors J6-428 and J6-429 with 20 hp and 40 hp Exhaust Fans J6-430 and J6-431;
- B. "A" Cement Storage Silos Withdrawal System ventilated to fabric collectors J7-367-DC and J7-410-DC each with 20 hp exhaust fan, J7-368-FA and J7-411-FA respectively, with fabric collector exhaust vented to compressor, including:
  - 1. Two belt conveyors:
    - a. J7-300-BC with 20 hp motor serving cement silos J6-401 through J6-406; and
    - b. J7-301-BC with 20 hp motor serving cement silos J6-407 through J6-412.
  - 2. Air compressor (J-355-FK-C300) with 250 hp motor and BC-4 (cartridge type air filter). BC-4 accepts exhaust from fabric collectors J7-367-DC and J7-410-DC and exhausts to air compressor;
  - 3. Three F-K Pumps:
    - a. One 250 hp FK Pump (J7-310-FK) accepting cement from belt conveyor J7-300-BC;
    - b. One 250 hp FK Pump (J7-315-FK) accepting cement from belt conveyor J7-301-BC; and
    - c. One 150 hp (stand-by) FK Pump (J5-124).
  - 4. Manifold system accepting cement from FK pumps and sending cement to railcar loadout, packhouse, or bulk truck loadout.
- C. East/West Bulk Loadout System including:
  - 1. Two (East & West) Loadout Silos J3-100 and J3-101 for Bulk Cement Storage Loadout Operations to truck or rail ventilated to fabric collector J3-200 and 30 hp Exhaust Fan J3-205;
  - 2. Two Airslides J3-170 and J3-171 from Bulk Cement Storage Silos J3-100 with J3-101 to Loadout Spouts J3-191-LS and J3-193-LS (each modified to Model UN800-12DCL) respectively;
  - 3. Two Loadout Spouts J3-191-LS and J3-193-LS from Airslides J3-170 and J3-171 respectively ventilated to fabric collectors J6-201-DC and J6-202-DC respectively each with exhaust fan (J6-206-FA and J6-207-FA respectively); and
  - 4. Three blowers:
    - a. Two 40 hp Blowers J3-185 and J3-186 serving Airslides J3-170 and J3-171 and Bulk Storage Silos J3-100 and J3-101; and
    - b. One 3 hp Blower J3-187 serving Airslides J3-170 and J3-171.
- D. Cement Packing System No. 1 ventilated to fabric collector J4-140 and 40 hp Exhaust Fan J4-145, including:
  - 1. Screens J4-100 and J4-101 from Bulk and Spillage Cement Transfer Lines to Hopper J4-105;
  - 2. Hopper J4-105 from Screens J4-100 and J4-101 to Rotary Feeder J4-110;
  - 3. Rotary Feeder J4-110 from Hopper J4-105 to Packer Bin J4-115;
  - 4. Packer Bin J4-115 from Rotary Feeder J4-110 to Packer J4-120;

Emission Unit 009 Permit Conditions

5. Packer J4-120 from Packer Bin J4-115 to Belt Conveyor J4-125;
  6. Belt Conveyor J4-125 from Packer J4-120 to Belt Conveyor J4-126;
  7. Belt Conveyor J4-126 from Belt Conveyor J4-125 to bagged cement palletizing and storage;
  8. Spill Hopper J4-106 from Packer J4-120 and Belt Conveyor J4-125 to Screw Conveyor J4-130;
  9. One 5 hp Screw Conveyor J4-130 from Spill Hopper J4-106 to Screw Conveyor J4-131;
  10. One 5 hp Screw Conveyor J4-131 from Screw Conveyor J4-130 to Fluxo Pump J4-135; and
  11. Fluxo Pump J4-135 from Screw Conveyor J4-131 to Screen J4-101.
- E. Cement Packing System No. 2 ventilated to fabric collector J4-540 and 50 hp Exhaust Fan J4-545, including:
1. Screen J4-500 and J4-101 from Bulk and Spillage Cement Transfer Lines to Hopper J4-500;
  2. Hopper J4-505 from Screen J4-500 to Rotary Feeder J4-510;
  3. Rotary Feeder J4-510 from Hopper J4-505 to Packer Bin J4-515;
  4. Packer Bin J4-515 from Rotary Feeder J4-510 to Packer J4-520;
  5. Packer J4-520 from Packer Bin J4-515 to Belt Conveyor J4-525;
  6. Belt Conveyor J4-525 from Packer J4-520 to Belt Conveyor J4-526;
  7. Belt Conveyor J4-526 from Belt Conveyor J4-525 to Belt Conveyor J4-527;
  8. Belt Conveyor J4-527 from Belt Conveyor J4-526 to bagged cement palletizing and storage;
  9. Spill Hopper J4-506 from Packer J4-520 and Belt Conveyor J4-525 to Screw Conveyor J4-530;
  10. One 5 hp Screw Conveyor J4-530 from Spill Hopper J4-506 to Screw Conveyor J4-531;
  11. One 5 hp Screw Conveyor J4-531 from Screw Conveyor J4-530 to Bucket Elevator J4-535;
  12. One 10 hp Bucket Elevator J4-535 from Screw Conveyor J4-531 to Rotary Feeder J4-512; and
  13. One 3 hp Rotary Feeder J4-512 from Bucket Elevator J4-535 to Hopper J4-505.

**OPERATIONAL CONDITIONS:**

1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Fabric collectors J7-367-DC and J7-410-DC shall be equipped with operational pressure differential indicator. (Rule 210.1)
4. Filtering area of each fabric collector J7-367-DC and J7-410-DC shall not be less than 462 square feet. (Rule 210.1)
5. Each fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
6. Visible emissions from stacks of fabric collectors J7-367-DC and J7-410-DC shall not exceed 5% opacity or Ringelmann  $\frac{1}{4}$ . (Rule 210.1)
7. Visible emissions from all other sources shall not exceed 10% opacity or Ringelmann  $\frac{1}{2}$ . (Rule 422, 40 CFR Part 60 Subpart F).
8. Particulate matter emission concentration shall not exceed 0.01-gr/scf. (Rule 210.1)
9. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
10. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
11. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
12. Conveyors shall be covered when in operation. (Rule 210.1)
13. Old "A" silo bulk load out shall not be used for Bulk Product Shipping. (Rule 210.1)
14. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)

Emission Unit 009 Permit Conditions

15. Operation of bulk loadout spouts (J3-191-LS and J3-193-LS) shall not exceed 16 hours per day. (Rule 210.1)
16. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
17. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422, 40 CFR Part 60 Subpart F)
18. Air Pollution Control Officer (APCO) or any authorized representative shall have access to and copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation or method required in this permit, and to sample, or require sampling, of emissions from source. (Rule 107)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to the District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector J6-428: (@ 6,855 acfm)	0.60 lb/hr 14.10 lb/day 2.57 ton/yr
Fabric Collector J6-429: (@ 8,500 acfm)	0.73 lb/hr 17.49 lb/day 3.19 ton/yr
Fabric Collector J7-367-DC: (@ 2,750 acfm)	0.01 gr/scf (Rule 210.1 BACT Requirement) 0.24 lb/hr 5.66 lb/day 1.03 ton/yr
Fabric Collector J7-410-DC: (@ 2,750 acfm)	0.01 gr/scf (Rule 210.1 BACT Requirement) 0.24 lb/hr 5.66 lb/day 1.03 ton/yr

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Emission Unit 009 Permit Conditions

Fabric Collector J3-200 (@ 6,400 acfm)	0.55 lb/hr 8.78 lb/day @ 16-hr/day 1.60 ton/yr
Fabric Collector J6-201-DC (@ 1,600 acfm)	0.14 lb/hr 2.19 lb/day @ 16-hr/day 0.40 ton/yr
Fabric Collector J6-202-DC (@ 1,600 acfm)	0.14 lb/hr 2.19 lb/day @ 16-hr/day 0.40 ton/yr
Fabric Collector J4-140 (@ 9,000 acfm)	0.77 lb/hr 18.48 lb/day 3.37 ton/yr
Fabric Collector J4-540 (@ 10,000 acfm)	0.86 lb/hr 20.64 lb/day 3.77 ton/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 010 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	010	Truck Loadout Station

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Truck Loadout Station, including following equipment:

- A. Cement Unloading and Surge equipment vented to Dust Collector J3-330-DC and 5 bhp Exhaust Fan J2-225-FA, including:
1. One 40 ton Surge Bin J3-300-SS receives cement from F-K Pump JJ-300-SS or J5-221-FK and discharges to Loadout Spout J3-316-LS;
  2. One pneumatic Positioner J3-315-LS positions Loading Spout J3-316-LS;
  3. Loadout Spout J3-316-LS discharges cement from Surge Bin J3-300-SS to trucks;
  4. Rotary Feeder J3-111-RF controls cement flow from Dust Collector J3-330-DL to Surge Bin J3-300-SS;
  5. Rotary Feeder J3-110-RF controls cement flow from Surge Bin J3-300-SS to Loadout Spout;
  6. One pneumatic Gate Valve J3-325-GA shuts off air flow from Positioner J3-315-LS to Dust Collector J3-330-DC; and
  7. Truck Scale J3-320 weighs trucks for shipping.

**OPERATIONAL CONDITIONS:**

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
2. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 202.1)
3. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
4. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)
5. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

Emission Unit 013 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	013	Raw Material Storage & Handling Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Raw Material Storage & Handling Operation, including following equipment:

- A. Quarry Overland Conveyor Terminus (Transfer Tower No.1) vented to Dust Collector C3-150 and 15 hp Exhaust Fan C3-151, including:
  - 1. Diverter Gates C3-025 and C3-035 diverts raw material from discharge of Overland Belt Conveyor C3-001 (BC-7) in EU 002 to Belt Conveyor C3-175 (Normal Operation) or to outside storage or Tripper Conveyor in EU 002;
  - 2. Gamma Metrics Sampling Tower vented to Dust Collector C3-190 and 20 hp Exhaust Fan C2-191;
  - 3. One 200 hp 36 in. Belt Conveyor C3-175 from Diverter Gates C3-025 and C3-035 to Diverter Gate C3-010;
  - 4. Diverter Gate C3-010 air op. from Belt Conveyor C3-175 to Surge Bin C3-020 or to bypass of Gamma Analyzer;
  - 5. Diverter Gate C3-024 air op. from Diverter Gate C3-010 to Belt Conveyor C3-200 or to outside storage;
  - 6. One 100 ton Surge Bin C3-020 from Diverter Gate C3-010 and Belt Conveyor C3-175 to Gamma Analyzer C3-050;
  - 7. Gamma Analyzer C3-050 from Surge Bin C3-020 to Weigh Feeder C3-100; and
  - 8. One 72 hp 72 in. Weigh Feeder C3-100 from Gamma Analyzer C3-050 to Belt Conveyor C3-200.
- B. Preblend Dome equipment vented to Dust Collector C4-150 and 25 hp Exhaust Fan C4-151, including:
  - 1. One 125 hp 36 in. Belt Conveyor C3-200 from Weigh Feeder C3-100 to Diverter Gate C3-225;
  - 2. One 1 hp Diverter Gate C3-225 from Belt Conveyor C3-200 to Rotary Stacker C4-001 or bypass to Belt Conveyor D1-001;
  - 3. One 60 hp Rotary Stacker C4-001 from Diverter Gate C3-225 to radial blending pile or to outside emergency pile with mobile equipment; and
  - 4. One 75 hp Scraper Reclaimer C4-025 from radial blending pile to Belt Conveyor D1-001.
- C. Reclaimed Raw Material Handling System vented to Dust Collectors D1-020 and D1-025 and 10 hp Exhaust Fans D1-021 and D1-026, including:
  - 1. One 150 hp 36 in. Belt Conveyor D1-001 from Scraper Reclaimer C4-025 and Belt Feeder D2-015 to Diverter Gate D2-020;
  - 2. One 3 hp 42 in. Belt Feeder D2-015 from Unloading Hopper D2-010 to Belt Conveyor D1-001; and
  - 3. Unloading Hopper D2-010 receives material from front end loader, bottom or rear dump trucks to Belt Feeder C2-015.



Emission Unit 013 Permit Conditions

- D. Raw Mill Feed Bin distribution equipment vented to Dust Collector D2-075 and 30 hp Exhaust Fan D2-076, including:
1. Diverter Gate D2-020 air op. from Belt Conveyor D1-001 to Belt Conveyor D2-025 or Preblend Bin S1 100;
  2. One 25 hp 36 in. Belt Conveyor D2-025 from Diverter Gate D2-020 to Diverter Gate D2-027;
  3. Diverter Gate D2-027 air op. from Belt Conveyor D2-025 to Belt Conveyor D2-030 or Reject Bin S1-301;
  4. One 25 hp 36 in. Belt Conveyor D2-025 from Diverter Gate D2-027 to Silica Storage Bin S1-201 or Iron Ore Bin S1-201 or Iron Ore Bin S1-401;
  5. One 1 hp 9 in. Screw Conveyor D2-078 from Dust Collector D2-075 to Reject Bin S1-301;
  6. One 600 ton Preblend Bin S1-001 from Diverter Gate D2-020 to Belt Feeder S1-003 (PTO 1147014A);
  7. One 800 ton Iron Ore Bin S1-401 from Belt Conveyor D2-030 to Belt Feeder S1-403 (PTO 1147014A);
  8. One 600 ton Reject Bin S1-301 from Diverter Gate D2-027 to Belt Feeder S1-303 (PTO 1147014A);
  9. One 600 ton Silica Bin S1-201 from Belt Conveyor D2-030 to Belt Feeder S1-203 (PTO 1147014A); and
  10. Five acres maximum outside emergency raw material storage areas located at Transfer Tower #1A, and east of Preblend Dome and in material storage areas.

**OPERATIONAL CONDITIONS:**

1. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
2. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
3. Collectors shall have operational differential pressure indicator. (Rule 209)
4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1 BACT)
5. Material belts shall utilize covers when in operation. (Rule 210.1 BACT)
6. Storage dome shall be primary source of storage and reclaim of limestone. Outside storage shall be used only for emergency backup and for strategic storage/reclaim necessary to maintain product chemistry. (Rule 210.1 BACT)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Emission Unit 013 Permit Conditions

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector C3-150:	0.05 lb/hr 1.23 lb/day
Fabric Collector C3-190:	0.10 lb/hr 2.47 lb/day
Fabric Collector C4-150:	0.01 lb/hr 0.16 lb/day
Fabric Collector D1-020:	0.05 lb/hr 1.23 lb/day
Fabric Collector D1-025:	0.05 lb/hr 1.23 lb/day
Fabric Collector D2-075:	0.19 lb/hr 4.65 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 014 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	014	Raw Mill System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Raw Mill System, including following equipment:

- A. Mill Feed Bin withdrawal equipment vented to Dust Collector S1-010 and 20 hp Exhaust Fan S1-100, including:
1. One 7.5 hp 48 in. Belt Feeder S1-003 withdraws material from Preblend Bin S1-001 and discharges to Weigh Feeder S1-004;
  2. One 1 hp 48 in. Weigh Feeder S1-004 from Belt Feeder S1-003 to Belt Conveyor S2-101;
  3. One 2 hp 36 in. Belt Feeder S1-403 withdraws material from Iron Ore Bin S1-401 and discharges to Weigh Feeder S1-404;
  4. One 2 hp 36 in. Weigh Feeder S1-404 from Belt Feeder S1-003 to Belt Conveyor S2-101;
  5. Two 5 hp Rotary Plow Feeder S1-305 withdraws material from Reject Bin S1-301 and discharges to Belt Feeder S1-303;
  6. One 1 hp 36 in. Belt Feeder S1-303 from Rotary Plow Feeder S1-305 to Weigh Feeder S1-304;
  7. One 1 hp 36 in. Weigh Feeder S1-404 from Belt Feeder S1-303 to Belt Conveyor S2-101;
  8. Two 5 hp Rotary Plow Feeder S1-205 withdraws material from Silica Bin S1-201 and discharges to Belt Feeder S1-203;
  9. One 1 hp 36 in. Belt Feeder S1-203 from Rotary Plow Feeder S1-205 to Weigh Feeder S1-204; and
  10. One 1 hp 36 in. Weigh Feeder S1-404 from Belt Feeder S1-203 to Belt Conveyor S2-101.
- B. Raw Mill Feed and Rejects Recirculation equipment vented to Dust Collector S2-115 and 20 hp Exhaust Fan S2-115, including:
1. One 25 hp 24 in. Belt Conveyor S2-101 collects material from Weigh Feeders S1-004, S1-404, S1-304, and S1-204 and discharges into Bucket Elevator S2-105;
  2. One 100 hp Bucket Elevator S2-105 from Belt Conveyor S2-101 to Belt Conveyor S2-106;
  3. One 3 hp 36 in. Belt Conveyor S2-106 from Bucket Elevator S2-105 to Mill Feed Bin S2-110 or to Open Pile Stacking Spout S2-114;
  4. One 50 ton Mill Feed Bin S2-110 from Belt Conveyor S2-106 to Triple Gate Feeder S3-105;
  5. One 3/4 hp Open Pile Stacking Spout S2-114 from Belt Conveyor S2-106 or Belt Feeder S2-112 to emergency pile;
  6. One 5 hp 42 in. Belt Feeder S2-112 from Mill Feed Bin S2-110 to Triple Gate Feeder S3-105;
  7. One 2 hp Reject Gate S3-111 from Roller Mill S3-110 to Rejects Drag Conveyor S3-111;
  8. One 72 hp Rejects Drag Conveyor S3-111 from Reject Gate S2-117 to Drag Conveyor S3-113;
  9. One 2 hp Reject Gate S3-118 from Roller Mill S3-110 to Rejects Drag Conveyor S3-112;
  10. One 72 hp Rejects Drag Conveyor S3-112 from Reject Gate S2-117 to Drag Conveyor S3-113;
  11. One 10 hp Drag Conveyor S2-113 from Rejects Drag Conveyor S3-111 and Rejects Drag Conveyor (S3-112) to Drag Conveyor S3-114; and
  12. One 10 hp Drag Conveyor S3-114 from Rejects Drag Conveyor S3-113 to Bucket Elevator S2-105.

Emission Unit 014 Permit Conditions

- C. Raw Mill Grinding System using preheater gases and vented to ICA/Rees Size 10-7200 Senior 12, 20 compartment Dust Collector S3-160 and 1,500 hp Exhaust Fan S3-187 shared with EU 014, including:
1. One 2,250 hp Roller Mill S3-110 accepts raw material for grinding from Triple Gate Feeder S3-117 and uses preheater gases to carry ground material to Classifier S3-120;
  2. One 150 hp Classifier S3-120 accepts Roller Mill dust entrained gases, classifies material returning coarse particles to Roller Mill S3-110, and carries fine particles to Cyclones S3-127 through S3-130;
  3. Cyclones accept dust laden gases from Classifier S3-120, remove particulate as S3-127 through S3-130 product, and discharges product in Airslides S4-101 and S4-102;
  4. One 2,500 hp Raw Mill System Fan S3-150 vents process gases from Roller Mill S3-1109 and Cyclones S3-127 through S3-130 and exhaust to Kiln/Mill Dust Collector S3-160;
  5. One 72 hp Isolation Damper S3-155 isolates mill from preheater exhaust gases when Roller Mill (S3-110) is not operating; and
  6. Louvre Dampers S3-159, S3-158, S3-145, and S3-157 control process gas flows during operation of Roller Mill S3-110.
- D. Raw Mill Product Handling System from discharge of Cyclones S3-127 through S3-130 and vented to Dust Collector S4-115 and 15 hp Exhaust Fan S4-116, including:
1. Two 14 in. Airslides S4-101 and S4-102 collect raw meal from Cyclone S3-127 through S3-130 hoppers and discharges to Airslide S4-103;
  2. One 16 in. Airslide S4-103 from Airslides S4-101, S4-102, and S4-105 to Airslide S4-104;
  3. One 16 in. Airslide S4-104 from Airslide S4-103 to Airslide S4-176 and raw meal sampling system vented by Dust Collector S4-205; and
  4. Two 20 hp Blowers S4-110 and S4-111 provides product conveying air to Airslides S4-101, S4-102, S4-103, and S4-104.
- E. Raw Mill Product Handling System from discharge of Kiln/Mill Dust Collector S3-160 Screw Conveyors vented to Dust Collector S4-145 and 10 hp Exhaust Fan S4-146, including:
1. One 20 hp 18 in. Screw Conveyor S4-130 collects dust from Screw Conveyors S3-183, S3-184, and S3-185 to Screw Conveyor S4-131;
  2. One 20 hp 18 in. Screw Conveyor S4-131 from Screw Conveyor S4-130 to Bucket Elevator S4-132 or F-K Pump S4-140;
  3. One 40 hp Bucket Elevator S4-132 from Screw Conveyor S4-131 to Airslide S4-105;
  4. One 8 in. Airslide S4-105 from Bucket Elevator S4-132 to Airslide S4-103;
  5. One 10 hp Blower S4-170 provides product conveying air to Airslide S4-105; and
  6. One 75 hp 150MM Pump S4-140 from Screw Conveyor S4-131 to Blending Silo F1-100 and vented to 1000 CFM Dust Collector S4-150 and 5 hp Exhaust Fan S4-151.
- F. Raw Meal Distribution to Blending Silo F1-100 vented to Dust Collector S4-205 and 30 hp Exhaust Fan S4-205 both shared with EU 015, including:
1. Raw Meal Sampling S8-100, S8-110, and S8-125 removes sample of raw meal from product stream discharging from Airslide S4-104 to Airslide S4-176;
  2. One 16 in. Airslide S4-176 from Airslide S4-104 to Airslide S4-177;
  3. One 16 in. Airslide S4-177 from Airslide S4-176 to Bucket Elevator S4-185;
  4. Two 5 hp Blowers S4-182 and S4-183 provide product conveying air to Airslide S4-176 and Airslide S4-177;
  5. One 150 hp Bucket Elevator S4-185 from Airslide S4-177 to Airslide S4-186;
  6. One 16 in. Airslide S4-186 from Bucket Elevator S4-185 to Distributor S4-188;
  7. Distributor S4-188 from Airslide S4-186 to Airslides S4-190, S4-191, S4-192, S4-193, S4-194, and S4-195;

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8. Airslides S4-190, S4-191, S4-192, S4-193, S4-194, and S4-195 from Distributor S4-188 to Blending Silo F1-100 (EU 015);
9. Two 7.5 hp Blowers S4-196 and S4-197 provide product conveying air to Distributor S4-188, Airslides S4-190, S4-191, S4-192, S4-193, S4-194, and S4-195; and
10. One 5 hp Blower S4-187 provides product conveying air to Airslide S4-186.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from all source operations except Raw Mill/Kiln Dust Collector S3-160 shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
2. Visible emissions from Raw Mill/Kiln Dust Collector S3-160 shall be less than 20% opacity except for not more than three minutes in any one hour. (Rule 401)
3. Particulate matter from any source operation shall be no more than 0.1 grains per cubic foot of gas at standard conditions. (Rule 404.1)
4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
5. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
6. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector S1-010:	0.10	lb/hr
Fabric Collector S2-115:	0.11	lb/hr
Fabric Collector S4-115:	0.16	lb/hr
Fabric Collector S4-145:	0.13	lb/hr
Fabric Collector S4-150:	0.05	lb/hr
Fabric Collector S4-205:	0.52	lb/hr
Total:	25.68	lb/day

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(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

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Emission Unit 015 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	015	Homogenizing & Kiln Feed System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Homogenizing & Kiln Feed System, including following equipment:

- A. Homogenizing Silo System vented to Dust Collector S4-205 shared with EU 014 and Exhaust Fan S4-206 shared with EU 014, including:
  - 1. One 10,000 ton Blending Silo F1-100 receives material from distribution Airslides S4-190, S4-191, S4-192, S4-193, S4-194, and S4-195 (EU 014);
  - 2. One 40 hp Blower F1-135 aeration air to Blending Silo F1-100 outer ring;
  - 3. One 100 hp Blower F1-136 standby blower;
  - 4. One 100 hp Blower F1-137 aeration air to Blending Silo F1-100 active chamber; and
  - 5. One 100 hp Blower F1-138 aeration air to Blending Silo F1-100 inactive chamber.
- B. Blending Silo Withdrawal System vented to Dust Collector F1-185 and 15 hp Exhaust Fan F1-106, including:
  - 1. One 14 in. Airslide F1-113 from Blending Silo F1-100 discharge to Airslide F1-141 or Kiln Feed Bin F1-150;
  - 2. One 14 in. Airslide F1-118 from Blending Silo F1-100 discharge to Airslide F1-151 or Kiln Feed Bin F1-150;
  - 3. One 14 in. Airslide F1-128 from Blending Silo F1-100 discharge to Airslide F1-130;
  - 4. One 40 ton Kiln Feed Bin F1-150 from Airslide F1-113 and Airslide F1-118 to Airslide F1-158 or Airslide F1-163;
  - 5. One 5 hp Blower F1-114 conveying air for Airslide F1-113 and Airslide F1-118;
  - 6. One 5 hp Blower F1-121 standby blower for Blower F1-114;
  - 7. One 14 in. Airslide F1-176 from Kiln Feed Bin F1-150 to truck loadout;
  - 8. One 14 in. Airslide F1-158 from Kiln Feed Bin F1-140 to Flowmeter F1-159;
  - 9. One 14 in. Airslide F1-163 from Kiln Feed Bin F1-150 to Flowmeter F1-164;
  - 10. One 25 hp Blower F1-165 provides aeration and conveying air to Kiln Feed Bin F1-150, Airslide F1-158, Airslide F1-163, and Airslide F1-176;
  - 11. One 25 hp Blower F1-166 standby blower for Blower F1-165;
  - 12. Flowmeter F1-159 from Airslide F1-158 to Distributor F1-170;
  - 13. Flowmeter F1-164 from Airslide F1-156 to Distributor F1-170;
  - 14. Distributor F1-170 from Flowmeter F1-159 and Flowmeter F1-164 to Airslide F1-172 or Airslide F1-174;
  - 15. Airslide F1-172 from Distributor F1-170 to Bucket Elevator F1-205;
  - 16. Airslide F1-174 from Distributor F1-170 to Bucket Elevator F1-200; and
  - 17. One 5 hp Blower F1-175 furnishes conveying air to Airslide F1-172, Airslide F1-174, and Distributor F1-170.
- C. Kiln Feed Elevating System vented to Dust Collector F1-235 and 20 hp Exhaust Fan F1-236, including:
  - 1. One 250 hp Bucket Elevator F1-200 from Airslide F1-174 to Airslide F1-225 or bypass chute to

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- Airslide S4-106;
2. One 250 hp Bucket Elevator F1-205 from Airslide F1-172 to Airslide F1-225 or bypass chute to Airslide S4-106;
  3. One 14 in. Airslide F1-225 from Bucket Elevator F1-200 or Bucket Elevator F1-205 to Airslide F1-230;
  4. One 14 in. Airslide F1-230 from Airslide F1-225 to Rotary Feeder G1-153 or Rotary Feeder G1-155 (EU 017);
  5. One 3 hp Blower F1-217 furnishes conveying air to Airslide F1-225 and Airslide F1-230; and
  6. One 3 hp Blower F1-218 standby blower for Blower F1-217.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any source operation shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
2. Particulate matter from any source operation shall be no more than 0.1 grains per cubic foot of gas at standard conditions. (Rule 404.1)
3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
4. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
5. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector S4-205:	Shared with EU 014
Fabric Collector F1-185:	0.21 lb/hr
Fabric Collector F1-235:	0.31 lb/hr
Total:	12.47 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)



Emission Unit 016 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	016	Coal Drying & Pulverizing System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Coal Drying & Pulverizing System, including following equipment:

- A. Coal Unloading and Storage equipment vented to Dust Collector G7-125 and 15 hp Exhaust Fan G7-126, including:
1. One 20 hp Car Shaker G7-110 shakes rail car to assist in withdrawal of coal during unloading;
  2. Two 50 ton Track Hoppers G7-101 and G7-102 discharge point for bottom dump coal rail cars;
  3. Two 0.75 hp 24 in. Vibrating Feeders G7-103 and G7-104 from Track Hoppers G7-101 and G7-102 to Belt Conveyor G7-105;
  4. One 7.5 hp 30 in. Belt Conveyor G7-105 from Vibrating Feeders G7-103 and G7-104 to Bucket Elevator G7-106;
  5. One 75 hp Bucket Elevator G7-106 from Belt Conveyor G7-105 to Diverter Gate G7-107;
  6. One pneumatic Diverter Gate G7-107 diverts from Bucket Elevator G7-106 to outside emergency coal pile or Conveyor Belt G7-108;
  7. One 15 hp 30 in. Belt Conveyor G7-108 from Diverter Gate G7-107 to Diverter Gate G7-115;
  8. One 1 hp Open Stacking Spout G7-109 stacks coal on open storage pile or into trucks;
  9. One pneumatic Diverter Gate G7-115 diverts from Conveyor Belt G7-108 to Reversible Conveyor Belt G7-116 or Coal Bin G7-210;
  10. One 7.5 hp 30 in. Reversible/Belt Conveyor G7-116 from Diverter Gate G7-115 to Coal Bin G7-200 or Coke Bin G7-220;
  11. One 1,000 ton Raw Coal Bin G7-200 accepts coal from Reversible/Belt Conveyor G7-116 and withdraws to Weigh Feeder G7-206;
  12. One 2 hp Vibrating Bin Bottom G7-201 assists withdrawal from Coal Bin G7-200 to Weigh Feeder G7-206;
  13. One 1,000 ton Raw Coal Bin G7-210 accepts coal from Diverter Gate G7-115 and withdraws to Weigh Feeder G7-216;
  14. One 2 hp Vibrating Bin Bottom G7-211 assists withdrawal from Coal Bin (G7-210) to Weigh Feeder G7-216;
  15. One 600 ton Raw Coke Bin G7-220 accepts coke from Reversible/Belt Conveyor G7-116 and withdraws to Weigh Feeder G7-226; and
  16. Manual Spile Bar Gate G7-225 restricts flow from Coke Bin G7-220 as required.
- B. Raw Coal Withdrawal equipment vented to Dust Collectors G7-238, G7-232, and G7-230 and respective 7.5 hp Exhaust Fans G7-239, G7-233, and G7-231, including:
1. One 3/4 hp 36 in. Weigh Feeder G7-206 withdraws from Coal Bin G7-200 and discharges to Belt Conveyor G7-235;
  2. One 3/4 hp 36 in. Weigh Feeder G7-216 withdraws from Coal Bin G7-210 and discharges to Belt Conveyor G7-235; and
  3. One 12 hp 36 in. Weigh Feeder G7-226 withdraws from Coke Bin G7-220 and discharges to Belt Conveyor G7-235.

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- C. Coal Mill Feed equipment vented to Dust Collector G7-255 and 7.5 hp Exhaust Fan G7-256, including:
  - 1. One 15 hp 24 in. Belt Conveyor G7-235 collects coal/coke from Weigh Feeders G7-206, G7-216, and G7-226 and discharges to Coal Mill Feed Bin G7-245;
  - 2. One 20 ton Coal Mill Feed Bin G7-245 receives coal/coke from Belt Conveyor G7-237 and discharges to Drag Chain G7-301;
  - 3. One 72 hp Drag Chain Conveyor G7-301 from Coal Mill Feed Bin G7-245 to Screw Feeder G7-305 or Diverter Gate G7-303;
  - 4. Manual Diverter Gate G7-303 from Drag Chain Conveyor G7-301 to outside emergency pile;
  - 5. One 5.5 kw Screw Conveyor G7-305 from Drag Chain Conveyor G7-301 to Coal Mill G7-306; and
  - 6. Manual Spile Bar Gate G7-250 restricts flow from Coal Mill Feed Bin G7-245 as required.
- D. Coal Mill Grinding System using preheater gases vented system to Dust Collectors G7-315 through G7-345 and 400 hp System Fan G7-355, including:
  - 1. One 350 hp Coal Mill G7-306 receives coal/coke from Screw Conveyor G7-305 and uses preheater gases to carry ground coal/coke to Classifier G7-307;
  - 2. One 60 hp Classifier G7-307 receives coal mill dust entrained gases, classifies returning coarse material to Coal Mill G7-306, and carries fine particles to Dust Collectors G7-315 through G7-345;
  - 3. One 400 hp Coal Mill System Fan G7-355 vents process gases from Coal Mill G7-306 and Dust Collectors G7-315 through G7-345 and exhausts to coal mill stack;
  - 4. Pneumatic Isolation Dampers G6-156 and G6-314 isolates Coal Mill G7-306 from process gas flow while not operating;
  - 5. Pneumatic Isolation Dampers G6-156 and G6-314 isolates Coal Mill G7-306 from cleaning gas flow while not operating;
  - 6. One 1 hp and two 2 hp Louver Dampers G6-152, G7-351, and G7-356 control of process gas flow during Coal Mill G7-306 operation;
  - 7. Pneumatic Isolation Dampers G6-316 through G6-346 and G7-317 through G7-347 isolates system Dust Collectors G7-315 through G7-345 from process gas flow while not in operation;
  - 8. Pneumatic Slide Gate G7-304 shuts off coal/coke flow to Coal Mill G7-306 reject chute as required; and
  - 9. Blower provides air for positive pressure seal to roller bearings.
- E. Coal Mill Product Handling equipment from discharge of Coal Mill System Dust Collectors vented to Dust Collector G7-420 and 12 hp Exhaust Fan G7-421, including:
  - 1. 31 - 0.5 hp Rotary Air Locks G7-319 through G7-349 assists in product withdrawal from system Dust Collectors G7-315 through G7-345 to Screw Conveyors G7-360 and G7-361;
  - 2. Two 3 hp 12 in. Screw Conveyors G7-360 and G7-361 from Rotary Air Locks G7-360 and G7-361 to Diverter Valve G7-405;
  - 3. One 0.5 hp Sampler G7-363 sample point for product downstream from Screw Conveyors G7-360 and G7-361;
  - 4. One 30 hp F-K Pump G7-400 from Screw Conveyor G7-360 and G7-361 to Diverter Valve G7-405;
  - 5. One 125 hp Compressor G7-404 provides compressed air to F-K Pump G7-400;
  - 6. One 125 hp standby Compressor G7-414 provides compressed air for F-K Pump G7-400;
  - 7. One 3/4 hp Diverter Valve G7-405 diverts from F-K Pump G7-400 to kiln ground Coal Bin G7-500 or precalciner ground Coal Bin G7-510;
  - 8. Manual Shut-Off Gates G7-318 through G7-348 manual shut-off of Dust Collectors from material outlet flow as required;
  - 9. One 100 ton Kiln Coal Bin G7-500 receives coal/coke from Diverter Valve G7-405 and discharges to Agitator G7-508;

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10. One 5 hp Agitator G7-508 receives coal/coke from Kiln Coal Bin G7-500 and discharges to Pfister Feeder G7-503;
11. Pneumatic Shut Off Gate G7-501 shuts off material flow from Kiln Ground Coal Bin G7-500;
12. Pneumatic Control Gate G7-502 shuts off material flow from Kiln Ground Coal Bin G7-500;
13. One 3 hp Pfister Feeder G7-503 receives coal/coke from Agitator G7-508 and conveys to Kiln Burner; and
14. Emergency Dump Chute discharges coal/coke from Agitator G7-518 to ground.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
4. Particulate matter from Coal Mill Dust Collectors G7-315, G7-325, G7-335, and G7-345 shall be no more than 0.031 gr/scf. (Rule 422, 40 CFR Part 60 Subpart Y)
5. All screw conveyors and airslides shall be completely enclosed. (Rule 210.1)
6. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)
7. Provisions for continuously recording oxides of nitrogen, oxides of sulfur, and oxygen content at outlets of Dust Collectors G7-315, G7-325, G7-335, and G7-345 by calculation based on concentration of these oxides and oxygen content as measured by continuous Emission Monitors on Kiln Fabric collector exhaust (EU 017). Temperature shall be continuously recorded at dust collector outlet manifold. (Rule 422, 40 CFR Part 60 Subpart F)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector G7-125:	0.08 lb/hr 1.95 lb/day
Fabric Collector G7-230:	0.03 lb/hr 0.82 lb/day
Fabric Collector G7-232:	0.03 lb/hr 0.82 lb/day

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Fabric Collector G7-235:	0.04 lb/hr
	1.03 lb/day
Fabric Collector	1.34 lb/hr
(Total of G7-315, G7-325, G7-335, and G7-345):	32.09 lb/day
Fabric Collector G7-420:	0.01 lb/hr
	0.25 lb/day
Fabric Collector G7-505:	0.05 lb/hr
	1.23 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 017 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	017	Preheater/Precalciner Portland Cement Kiln

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Preheater/Precalciner Portland Cement Kiln, including following equipment:

- A. Pyroprocessing equipment vented to ICA/Rees size 20-7200 senior 12, 20 compartment dust collector S3-160 and 1500-hp exhaust fan S3-187 shared with EU 014, including:
  - 1. 2-hp louver damper (S3-186) controlling process gas flow while gas circuit is operational;
  - 2. Ten 0.5-hp tipping valves S3-162 through S3-171 compartments 1 through 10 tipping valves for material flow to screw conveyor S3-183;
  - 3. Ten 0.5-hp tipping valves S3-172 through S3-181 compartments 11 through 20 tipping valves for dust flow to screw conveyor S3-185;
  - 4. 110-hp 14 in. screw conveyor (S3-183) serving compartments 1 through 10 to discharging to screw conveyor S4-130;
  - 5. 10-hp 14 in. screw conveyor (S3-184) serving plenum chamber discharging to screw conveyor S4-130;
  - 6. 10-hp 14 in. screw conveyor (S3-185) serving compartments 11 through 20 discharging to screw conveyor S4-130;
  - 7. 125-hp reverse air fan (S3-151) providing reverse air flow during baghouse operation; and
  - 8. Pneumatic dampers S3-188 and S3-189 controlling air flow during dust collector S3-160 operation.
- B. Preheater/Precalciner equipment, including:
  - 1. Two 5-hp rotary feeders G1-153 and G1-155 receiving feed from airside F1-230 and discharging to preheater G2-100;
  - 2. Two 5-hp shut-off gates G1-153 and G1-155 isolation gates for rotary feeders G1-153 or G1-155;
  - 3. 6-stage preheater G2-100 receives kiln feed from rotary feeders G1-153 or G1-155, discharging from stage 5 to precalciner G2-125;
  - 4. Multiple fuel (gas, coal, and coke) precalciner G2-125 receiving preheated kiln feed from stage 5 under flow, (precalcines kiln feed and feeds kiln G2-150 via preheater G2-100 stage 6);
  - 5. 5-hp cooling fan G2-130 providing ambient air for cooling precal coal burner;
  - 6. Three 1-hp louver dampers G6-105, G6-110, and G6-155 controlling process gas flow during kiln G2-150 operation;
  - 7. 2-hp louver damper G6-154 bleed-in ambient air for kiln ID Fan G6-150 (protection of overheating);
  - 8. Pneumatic isolation damper G6-153 (isolates coal circuit from preheater exhaust gases);
  - 9. Tertiary air duct (G6-100) from cooler G2-200 to preheater G2-100 and associated valves and piping (NOx control system); and
  - 10. 2500-hp kiln ID Fan (G6-150 – fan wheel 158” dia. X 18<sup>3</sup>/<sub>8</sub>” at tip and 34<sup>3</sup>/<sub>8</sub>” at inlet) providing gas flow through pyroprocessing circuit.

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C. Kiln equipment, including:

1. 350-hp rotary kiln G2-150 receiving hot meal from preheater G2-100 stage 6 and discharging to clinker cooler G2-100;
2. Two 1-hp variable orifice (G2-154) providing gas flow restriction to kiln G2-150 exhausting to preheater G2-100 as required;
3. 2-hp 9 in. screw conveyor (G2-165) serving kiln G2-150 feed end discharging to tote box;
4. Tipping valve (G2-166) controlling material flow from screw conveyor G2-165 discharging to tote box;
5. Tipping valve (G2-184) serving kiln G2-150 discharging to cooler drag chain (G2-206);
6. 15-hp blower (G2-177) providing cooling air to kiln G2-150 feed end seal;
7. 20-hp blower (G2-180) providing cooling air to kiln G2-150 nose ring;
8. Blower G2-162 pressurizing fan for kiln G2-150 discharge end seal;
9. Damper G2-183 providing flow control to discharge end seal;
10. 40-hp blower (G2-175) providing primary air to kiln G2-150 burner;
11. Activated Carbon Injection (ACI) System with 3800-cubic foot powder activated carbon (PAC) storage silo including bin vent filter with 5-hp motor, dual metering system, and dual educators each with 20-hp motor; and
12. Ducting from Coal Mill Stack to Kiln Baghouse S3-160 routing from dust collectors G7-315, G7-325, G7-335, and G7-345 (EU 016).

**NOTIFICATION REQUIREMENTS:**

In accordance with District Rule 201.II (Permits Required), a person shall notify the Control Officer before operating or using equipment granted in this Authority to Construct. This Authority to Construct shall serve as a temporary Permit to Operate only after such notification. Such notification shall be completed in writing, ATC/PTO Notification form is available at the District website:

[http://www.kernair.org/Main\\_Pages/Subpages/Forms\\_Sub/Applications\\_Forms.html](http://www.kernair.org/Main_Pages/Subpages/Forms_Sub/Applications_Forms.html). Form can be mailed to the District Administrative Office at: 2700 "M" Street Suite 302, Bakersfield, CA 93301, e-mailed to the District at the following address: [ekapcd@co.kern.ca.us](mailto:ekapcd@co.kern.ca.us), or sent by FAX to the District at: (661) 862-5251

**DESIGN CONDITIONS:**

- a. Visible emissions from all ductwork shall not exceed 0% opacity (Ringelmann 0). (Rule 210.1 BACT Requirement)
- b. Slat conveyor shall be covered during operation. (Rule 210.1 BACT requirement)
- c. Mist eliminator shall be installed on exhaust of silo and visible emissions shall be less than 10% opacity. (Rule 210.1 BACT requirement)

**OPERATIONAL CONDITIONS:**

1. Refuse Derived Fuel (RDF) shall not exceed 50% of the total heat content of the fuel based on a quarterly basis. (Rule 210.1)
2. Use of coal shall not exceed 90,000 tons per year in the kiln system. (Rule 210.1)
3. Use of petroleum coke shall not exceed 50,000 tons per year in the kiln system. (Rule 210.1)
4. Use of RDF shall not exceed 47,000 tons per year. (Rule 210.1)
5. Use of tire derived fuel shall not exceed 70,000 tons per year. (Rule 210.1)
6. Use of biomass shall not exceed 70,500 tons per year. (Rule 210.1)

Emission Unit 017 Permit Conditions

7. TDF utilized for pyroprocessing system shall not exceed 50%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
8. Biomass utilized for pyroprocessing system shall not exceed 40%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
9. RDF utilized for pyroprocessing system shall not exceed 50%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
10. TDF use shall not exceed 70% of all fuel on a weight basis within any 24 hour period. (Rule 210.1)
11. District approval is required prior to use of TDF, biomass (cogeneration fines), and biomass (agriculture material).
12. Kiln dust collector shall be equipped with operational exhaust gas temperature indicator. (Rule 210.1)
13. Each kiln dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 210.1)
14. Each fabric collector shall be equipped with pulse-jet cleaning mechanism or equivalent. (Rule 210.1)
15. Conveyors handling kiln dust shall be totally enclosed. (Rule 210.1 BACT)
16. Particulate emissions from sources other than kiln stack shall be no more than 0.1-gr/scf. (Rule 404.1)
17. Visible emissions from kiln shall not exceed 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
18. Visible emissions from all other sources shall not exceed 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
19. Particulate matter emissions from kiln dust collector shall be no more than 0.30 lb/ton of dry feed to kiln. (Rule 422, 40 CFR Part 60 Subpart F)
20. Kiln shall be fired only with coal, petroleum coke, natural gas, biomass, engineered municipal waste or tire derived fuel. No other combustible products shall be added to kiln system without prior written permission of Control Officer. (Rule 210.1)
21. Process shall not be operated unless emission control equipment is in operation. (Rule 210.1)
22. Material removed from dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
23. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
24. Ductwork connecting material drop points shall be maintained in air-tight condition to prevent re-entrainment into the atmosphere. (Rule 210.1)
25. No air contaminant shall be released into atmosphere which causes public nuisance or public health hazard. (Rule 419 and CH&SC, Sec 41700)
26. All fines collected in dust collectors shall be returned to process or introduced into final product. (Rule 210.1)
27. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rule 422, 40 CFR Part 60 Subpart F)
28. Lehigh Southwest Cement Company shall maintain files including:
  - a. Data collected from in-stack monitoring instruments and process monitoring;
  - b. Fuel input rate;
  - c. Sulfur content of fuels input into kiln;
  - d. Clinker production rates; and
  - e. Results of all source tests and calibrations checks.
29. APCO or any authorized representative shall have access to and be provided, upon request, with copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation, or method required in this permit, and to sample, or require sampling, of emissions sources. (Rule 107)
30. Kiln dust collector exhaust stack shall be equipped with permanent sampling ports, sampling platform, and access ladder. (Rule 108.1)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

**Particulate Matter (PM<sub>10</sub>):**

Kiln Baghouse S3-160:	0.01	gr/acfm
	17.90	lb/hr
	429.60	lb/day
	78.40	ton/yr

PAC Silo Bin Vent Filter:

0.0013	gr/acfm
0.02	lb/hr
0.40	lb/day
0.07	ton/yr

**Sulfur Compounds (SO<sub>x</sub> as SO<sub>2</sub>):**

295.25	lb/hr	(24 hr avg. - including coal mill exhaust)
7,086.00	lb/day	
1239.20	ton/yr	

**(SO<sub>x</sub> as SO<sub>4</sub>):**

29.54	lb/hr	(24 hr avg. - including coal mill exhaust)
708.96	lb/day	
129.39	ton/yr	

**Oxides of Nitrogen (NO<sub>x</sub> as NO<sub>2</sub>):**

281.33	lb/hr	(24 hr avg. - including coal mill exhaust)
6,752.00	lb/day	
1,232.24	ton/yr	

**Volatile Organic Compounds (VOC):**  
(As defined in Rule 210.1)

45.08	lb/hr	(24 hr avg. - including coal mill exhaust)
1,082.00	lb/day	
197.47	ton/yr	

**Carbon Monoxide (CO):**

3,033.00	lb/hr	(3 hr avg. - including coal mill exhaust)
2,135.00	lb/hr	(8 hr avg. - including coal mill exhaust)
1,282.00	lb/hr	(24 hr avg. - including coal mill exhaust)
900.00	lb/hr	(365 day rolling avg.)
30,768.00	lb/day	(maximum day)
21,600.00	lb/day	(annual avg. day)
3942.00	ton/yr	



Emission Unit 017 Permit Conditions

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rule 201.1, 209 and 210.1)

**SPECIAL CONDITIONS:**

- aa. Kiln fabric collector stack shall be equipped with continuously recording oxides of nitrogen, oxides of sulfur, carbon monoxide, oxygen, opacity, and temperature monitors. (Rules 210.1 and 422, 40 CFR Part 60 Subpart F)
- bb. Reports of excess emissions shall be submitted semiannually for all opacity exceedances of six minutes or longer. Report shall comply with requirements of Code of Federal Regulations Section 40 Part 60.7c. (Rule 422, 40 CFR Part 60 Subpart F)

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Emission Unit 018 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	018	Clinker Cooler

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Clinker Cooler, including following equipment:

- A. Clinker Cooler equipment vented to Dust Collector G6-210 and 1,250 hp Exhaust Fan G6-220, including:
  - 1. Two hydr. dr. Clinker Cooler G2-200 receives clinker from kiln which is cooled and discharges to Deep Pan Conveyor G4-100;
  - 2. One 75 hp Cooling Fan G2-231 provides ambient air for Cooler G2-200 compartment #1;
  - 3. One 100 hp Cooling Fan G2-233 provides ambient air for Cooler G2-200 compartment #2;
  - 4. One 150 hp Cooling Fan G2-235 provides ambient air for Cooler G2-200 compartment #3;
  - 5. One 200 hp Cooling Fan G2-237 provides ambient air for Cooler G2-200 compartment #4;
  - 6. One 100 hp Cooling Fan G2-239 provides ambient air for Cooler G2-200 compartment #5;
  - 7. One 125 hp Cooling Fan G2-241 provides ambient air for Cooler G2-200 compartment #6;
  - 8. One 100 hp Cooling Fan G2-243 provides ambient air for Cooler G2-200 compartment #7;
  - 9. One 100 hp Cooling Fan G2-245 provides ambient air for Cooler G2-200 compartment #8;
  - 10. Louver Dampers G2-230, G2-232, G2-234, G2-235, G2-238, G2-240, G2-242, and G2-244 flow control to each of eight Cooler compartments;
  - 11. Tipping Valves G2-210 through G2-217 material flow control from each of eight Cooler G2-200 compartments to Drag Chain G2-206; and
  - 12. One 50 hp Clinker Breaker G2-205 reduces size of clinker prior to discharge to Deep Pan Conveyor G4-100.
- B. Clinker Cooler Vent and Dust Return equipment, including:
  - 1. Six 40 hp Heat Exchanger G6-200 receives Cooler G2-200 vent gases for cooling prior to Dust Collector G6-210;
  - 2. One 15 hp Screw Conveyor G6-202 from Heat Exchanger G6-200 to Screw Conveyor G6-213;
  - 3. Manual 12 in. Tipping Valve G6-203 controls material flow from Screw Conveyor G6-202 to Screw Conveyor G6-213;
  - 4. Manual 2 X 8 Isolation Dampers G6-250 through G6-265 isolates Dust Collector G6-210 compartments from Cooler G2-200 vent air flow;
  - 5. Eight Shut-Off Gates G6-240 through G6-247 shuts off material flow from Dust Collector G6-210 hoppers to Screw Conveyors G6-211 and G6-212;
  - 6. Eight 0.5 hp Tipping Valves G6-190 through G6-197 and G6-210 controls material flow from each of eight Dust Collector Hoppers to Drag Chains G6-211 and G6-212;
  - 7. One 20 hp 18 in. Screw Conveyor G6-216 from Screw Conveyor G6-213 to Screw Deep Pan Conveyor G4-100;
  - 8. One 20 hp 18 in. Screw Conveyor G6-213 from Screw Conveyor G6-202, G6-211 and G5-212 to Screw Conveyor G6-216;
  - 9. One 0.5 hp Louver Damper G6-215 vent air flow control;

Emission Unit 018 Permit Conditions

10. Cyclone Dust Collector G4-120 collects dust from Deep Pan Conveyor G4-100, returns dust to Deep Pan Conveyor and Cooler G2-200 discharge and of vents to cover of G2-200;
  11. One 10 hp Exhaust Fan G4-121 vents from Dust Collector G4-120 and vents to Cooler G2-200; and
  12. Tipping Valve G4-122 material flow control from Dust Collector G4-120 to Deep Pan Conveyor G4-100.
- C. Clinker Silo Feed equipment vented to Dust Collector G4-125 and 20 hp Exhaust Fan G4-126 shared with EU 19, including:
1. One 60 hp Deep Pan Conveyor G4-100 receives material from Clinker Cooler G2-200 and discharges to Clinker Storage Silo D3-100.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Particulate matter from clinker cooler shall be no more than 0.10 lb/ton of dry feed to kiln. (Rule 422, Subpart F)
4. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)
5. Clinker cooler exhaust stack shall be equipped with permanent sampling ports, sampling platform, and access ladder. (Rule 108.1)
6. When clinker cooler is not in operation, clinker may be transferred to and from outside storage at rate not to exceed 300.34 lb PM<sub>10</sub>/day (example: handling 1000 t/d with 2.2 drops) in addition to quantities permitted in EU 017, Kiln, and EU 019, Clinker Storage and Reclaim. (Rule 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

<b><u>Particulate Matter (PM10):</u></b>	12.51 lb/hr (Exhaust from Clinker Cooler Dust Collector G6-210)
	300.34 lb/day
	0.01 gr/acfm

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 019 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	019	Clinker Storage & Reclaim Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Clinker Storage & Reclaim Operation, including following equipment:

- A. Clinker Storage Silo vented to Dust Collector G4-125 and Exhaust Fan G4-126 both shared with EU 018, including:
  - 1. One 50,000 ton Clinker Silo D3-100 receives clinker from Deep Pan Conveyor G4-100 (EU 018).
- B. Clinker Withdrawal and Conveying System vented to Dust Collector E1-225 with 1773-sq.ft of filter area and 30-hp Exhaust Fan with 6,000-acfm volumetric flow rate E1-226 and Dust Collector E1-232 and 20-hp Exhaust Fan E1-233, including:
  - 1. Three Dustless Feeders E1-215 through E1-217 transfers clinker from Silo D3-100 to Apron Conveyor E1-220;
  - 2. One 30-hp Apron Conveyor E1-220 conveys clinker to Transfer Tower #1 and to Diverter Gate E1-205 and E1-206;
  - 3. Pneumatic Diverter Gate E1-205 from Apron Conveyor E1-220 to Truck Loading Spout E1-207LS vented to Dust Collector E1-225 and Exhaust Fan E1-226;
  - 4. Pneumatic Diverter Gate E1-206 from Apron Conveyor E1-220 to Belt Conveyor E1-230;
  - 5. One 3/4-hp Loading Spout E1-207 loads trucks for transfer to outside storage; and
  - 6. One 20-hp 24 in. Belt Conveyor E1-230 transfers clinker from Diverter Gate E1-206 and discharges into Finish Mill Clinker Bin E3-110 vented to Dust Collector E1-232 and Exhaust Fan E1-233.
- C. Clinker Reclaim and Gypsum Feed System vented to Dust Collector E3-130 and 20-hp Exhaust Fan E3-131 and Dust Collector E1-232 and Exhaust Fan E1-233, including:
  - 1. One 20 ton Feed Hopper E1-104 receives clinker or gypsum from loader to Belt Conveyor E1-105;
  - 2. One 30-hp 24 in. Belt Conveyor E1-105 transports clinker and gypsum from feed hopper to Rotary Distributor E1-107;
  - 3. One 0.75-hp Rotary Distributor E1-107 receives material from Belt Conveyor E1-105 and discharges to Clinker Bin E3-110, Clinker-Gypsum Bin E3-100, or Gypsum Bin E3-100, or Gypsum Bin E4-110;
  - 4. One 650 ton Clinker Bin E3-110, one 650 or 350 ton Clinker-Gypsum Bin E3-100 and one 350 ton Gypsum Bin E4-110 for holding clinker and gypsum for proportioned for withdrawal as mill feed for B-3 Finish Mill E3-300 and B-4 Finish Mill E4-300; and
  - 5. Outside Clinker Storage area 5 acres or less and Reclaim Hopper E1-104, located west of finish mill feed bins and around reclaim feed hopper, Feed Hopper E1-104 to Belt Conveyor E1-105 discharging to Clinker-Gypsum Bins E3-100, E3-110 or E4-110.
- D. Clinker Conveying System including:
  - 1. 300-ft. by 36-in. covered Clinker Belt Conveyor E1-240 with 10-hp motor transporting clinker from transfer tower to “Un-elevator;”

Emission Unit 019 Permit Conditions

2. "Un-Elevator" receiving clinker from Belt Conveyor E1-240, and
3. MAC Model MSS8 cartridge fabric collector, E1-245, with 928-sq.ft. collection area and 2700-cfm volumetric flow rate serving Un-Elevator.

**OPERATIONAL CONDITIONS:**

1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Belt conveyor(s) shall be equipped with dust-tight cover. (Rule 210.1)
4. There shall be no visible emissions from fabric collectors G4-125, EI-130, and EI-232 and conveyors. (Rule 210.1)
5. Visible emissions from fabric collectors EI-225 and EI-245 shall not exceed 5% opacity or Ringelmann No. ¼. (Rule 210.1)
6. Fabric collectors shall be maintained in proper working order. (Rule 209)
7. Fabric dust collector (EI-225) volumetric exhaust flow rate shall not exceed 6,000 actual cubic feet per minute (acfm) ±10%. (Rule 210.1)
8. Fabric dust collector (EI-245) volumetric exhaust flow rate shall not exceed 2,700-acfm ±10%. (Rule 210.1)
9. Particulate matter exhaust concentration from fabric collectors (EI-225 and EI-245) shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
10. Operation of fabric dust collector (EI-245) not exceed 600-hours/year. (Rule 210.1)
11. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, Subpart F)
12. Clinker silo(s) shall serve as primary clinker storage. (Rule 210.1 BACT Requirement)
13. All conveyors transporting dry material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
14. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
15. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
16. Material collected/removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
17. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
18. Lehigh Southwest Cement Company shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
19. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
20. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
21. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

Emission Unit 019 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits on any fabric collector(s) shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed following limits:

**Particulate Matter (PM10):**

Fabric Collector (G4-125) 5000-acfm	0.002 gr/acf 0.09 lb/hr 2.06 lb/day 0.38 tons/yr
Fabric Collector (EI-130) 4200-acfm	0.002 gr/acf 0.07 lb/hr 1.73 lb/day 0.32 tons/yr
Fabric Collector (EI-232) 5000-acfm	0.002 gr/acf 0.09 lb/hr 2.06 lb/day 0.38 tons/yr
Fabric Collector (EI-225) 6000-acfm	0.01 gr/acf 0.51 lb/hr 12.34 lb/day 2.25 tons/yr
MAC Fabric Collector (EI-245) (Model SS8) 2700-acfm	0.01 gr/acf 0.23 lb/hr 5.55 lb/day 0.07 tons/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 020 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	020	B-3 Finish Mill

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** B-3 Finish Mill, including following equipment:

- A. Finish Mill Feed Proportioning System vented to Dust Collector E3-135 and Exhaust Fan E3-136 (3450 CFM 10 hp), including:
  - 1. Three 30 in. Weighfeeders E3-205 1.5 hp, E3-202 .75 hp, and E3-213 1 hp from Clinker and Gypsum Bins E3-110, E3-100, and E4-110 to Belt Conveyor E3-216; and
  - 2. One 24 in. 10 hp Belt Conveyor E3-216 from Weighfeeders E3-205, E3-202, and E3-213 to B-3 Finish Mill E3-300, vented at discharge end to Dust Collector E3-345.
- B. Finish Mill and Auxiliary Equipment vented to Dust Collector E3-345 and Exhaust Fan E3-346 (30,000 CFM Max., 200 hp), including:
  - 1. One 3,000 hp B-3 Finish Mill E3-300 two compartment mill grinds proportioned clinker-gypsum mix from Belt Conveyor E3-216 to Bucket Elevator E3-320;
  - 2. One 60 hp Bucket Elevator E3-320 from B-3 Finish Mill E3-300 to Airslide E3-322;
  - 3. One 14 in. Airslide E3-322 from Bucket Elevator E3-320 to Airslide E3-330;
  - 4. One 14 in. Airslide E3-330 from Airslide E3-322 to Airslide E3-332;
  - 5. One 14 in. Airslide E3-332 from Airslide E3-330 into Air Separator E3-340 distributor plate;
  - 6. One 20 hp Blower E3-331 provides product conveying air for Airslide E3-322 and Airslide E3-330 and Airslide E3-332;
  - 7. One 1 hp Cement Sampler E3-360 located in Hopper E3-359, automatically withdraws sample from finished cement E3-stream to Cement Pump E3-400;
  - 8. One 300 hp Air Compressor-Duplex E3-401 and E3-402 provides product conveying air for Cement Pump E3-400;
  - 9. One 5 hp Screw Conveyor E3-347 transfers Dust Collector E3-345 product return to finished cement stream to Cement Pump E3-400; and
  - 10. One 5 hp Screw Conveyor E3-349 transfers Dust Collector E3-345 product return to finished cement stream to Cement Pump E3-400.
- C. Dust Collector E3-385 and Exhaust Fan E3-386 (78,000 cfm, 200 hp), including:
  - 1. Air Separator E3-370 from Airslide E3-332. Mill product is separated using Polysius SEPOL high efficiency separator by circulating air into finished and unfinished cement. Finished product flows through Airslides E3-390 and E3-391 to Airslide E3-392 or through Cooler Bypass Gate E3-393 to Cement Pump E3-400. Unfinished product returns to B-3 Finish Mill E3-300;
  - 2. Airslide from Air Separator Discharge Gate E3-406 to Cement Cooler E3-395;
  - 3. Cement Cooler E3-395 from airslide, cooler discharges to airslide;
  - 4. Airslide from Cooler E3-395 to Cement Pump E3-400;
  - 5. Blower provides product conveying air to airslides; and
  - 6. One 200 hp Cement Pump E3-400 from Air Separator E3-370 through Cement Cooler E3-395 or through Cooler Bypass Gate E3-407 to twelve "A" Cement Storage Silos J6-401 to J6-412 (EU 009) and/or Cement Storage Silo J1-300 (EU 022).

Emission Unit 020 Permit Conditions

**OPERATIONAL CONDITIONS:**

1. Visible emission from any source operation shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
2. Visible emissions from fabric collector E3-385-DC shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
4. All conveyor transfer points and airslides shall be completely enclosed and ducted to operational dust collector. (Rule 210.1)
5. Each dust collector compartment shall be equipped with operational differential pressure indicator and automatic cleaning mechanism. (Rule 210.1)
6. Each dust collector shall be operated and maintained per manufacturer's recommendations to achieve design control efficiency. (Rule 209)
7. Compliance with all operational conditions shall be verified by appropriate record keeping of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits on dust collectors E3-345 and E3-385 shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

E3-135 Baghouse:	0.01	grains/acf
	0.22	lb/hr
	5.18	lb/day
E3-345 Baghouse:	0.01	grains/acf
	1.54	lb/hr
	37.03	lb/day
E3-385 Baghouse:	0.01	grains/acf
	4.01	lb/hr
	96.27	lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)



Emission Unit 021 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	021	B-4 Finish Mill

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** B-4 Finish Mill, including following equipment:

- A. Finish Mill Feed Proportioning System vented to Dust Collector E4-135 and 10 hp Exhaust Fan E4-136, including:
  - 1. One 1.5 hp 30 in. Weigh Feeder E4-205, one 0.75 hp 30 in. Weigh Feeder E4-202, and one 15 hp 30 in. Weigh Feeder E4-213 from Clinker and Gypsum Bins E3-110, E3-100, and E4-110 to Belt Conveyor E4-216; and
  - 2. One 15 hp 24 in. Belt Conveyor E4-216 from Weigh Feeders E4-205, E4-202, and E4-213 to Belt Conveyor E4-220, discharge end vented to Dust Collector E4-430.
- B. Finish Mill and Separator Feed Handling System vented to Dust Collector E4-430 and 5750 CFM, 20 hp Exhaust Fan E4-431, including:
  - 1. One 3 hp 30 in. Belt Conveyor E4-220 receives proportioned clinker/gypsum feed to transfer to Finish Mill E4-300 or, when reversed, to truck for calibration check;
  - 2. One 20 in. Airslide E4-301 from Finish Mill E4-300 to Bucket Elevator E4-305;
  - 3. One 5 hp Blower E4-335 provides product conveying air to Airslide E4-301 and Ball Trap E4-302 in Airslide E4-301;
  - 4. Ball Trap E4-302 air fluidized box in Airslide E4-301 to remove tramp metal from mill discharge stream to Bucket Elevator E4-305;
  - 5. One 125 hp Bucket Elevator E4-305 from Airslide E4-301 discharges to Airslide E4-310;
  - 6. One 20 in. Airslide E4-310 from Bucket Elevator E4-305 to Airslide E4-314;
  - 7. One 20 in. Airslide E4-314 from Airslide E4-310 to Separator Feed Distributor E4-311 through flowmeter E4-332;
  - 8. Distributor E4-311 from Airslide E4-314 to separator feed Airslides E4-312 and E4-313;
  - 9. Two 14 in. Airslides E4-312 and E4-313 from Distributor E4-311 to Separator E4-320; and
  - 10. One 10 hp Blower E4-315 provides product conveying air to Airslides E4-310, E4-314, E4-316, and E4-317.
- C. B-4 Finish Mill Grinding and Mill Ventilation System to Dust Collector E4-420 and 200 hp Exhaust Fan E4-421, including:
  - 1. One 3,000 hp Finish Mill E4-300: Two compartment mill grinds proportioned clinker/gypsum mix from Belt Conveyor E4-220 discharges to Airslide E4-301;
  - 2. One 15 hp 14 in. Screw Conveyor E4-423 transfers collected dust from Dust Collector E4-420 to Screw Conveyor E4-424;
  - 3. One 10 hp 14 in. Screw Conveyor E4-424 from Screw Conveyor E4-423 to Airslide E4-301; and
  - 4. One 3 hp 14 in. Screw Conveyor E4-425 from Screw Conveyor E4-424 to Airslide E4-301.

Emission Unit 021 Permit Conditions

- D. B-4 Finished Cement Product System, including:
1. One 200 hp Separator E4-320 receives mill product from Airslides E4-312 and E4-313, separates finished product by air from transfer to Dust Collector E4-410 and returns unfinished material to Finish Mill E4-300;
  2. Dust Collector E4-410 receives airborne cement from Separator E4-320, removes particulate as product and product discharges in Airslides E4-345, E4-346, E4-347, and E4-348;
  3. One 700 hp Exhaust Fan E4-411 vents Dust Collector E4-410;
  4. Four 10 in. Airslides E4-345, E4-346, E4-347, and E4-348 from Dust Collector E4-410 to Airslide E4-355 (E4-351 and E4-354 are integral with E4-355);
  5. One 13 in. Airslide E4-355 from Airslides E4-345 through E4-348 to Cement Cooler E4-360 or to Cooler Bypass Airslide E4-350;
  6. One 13 in. Airslide E4-350 receives cement from Airslide E4-355 through cooler bypass to Sampler E4-361;
  7. One 15 hp Blower E4-349 provides product conveying air to Airslides E4-345, E4-346, E4-347, E4-348, E4-355, E4-351, E4-354, and E4-350;
  8. One 125 hp Cement Cooler E4-360 cools finished cement received from Airslide E4-355 and discharges to Sampler E4-361; and
  9. One 1 hp Sampler E4-361 extracts cement sample from product stream enroute to Pump E4-400.
- E. B-4 Finished Cement Pump System vented to Dust Collector E4-403 and 1.5 hp Exhaust Fan E4-404, including:
1. One 125 hp Cement Pump E4-400 receives cement from Airslide E4-350 to Cement Storage-Loadout Silos J3-100 and J3-101 and/or twelve "A" Silos J6-401 to J6-412 (EU 009) and/or cement storage and loadout operation (EU 022); and
  2. Duplex 400 hp Air Compressor E4-380 and E4-401 provides product conveying air for Cement Pump E4-400.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
2. Visible emissions from fabric collector E4-410-DC shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
3. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
5. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
6. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec. 41700)

Emission Unit 021 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSIONS LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector E4-135:	0.05 lb/hr
	1.23 lb/day
Fabric Collector E4-420:	1.34 lb/hr
	32.09 lb/day
Fabric Collector E4-410:	3.36 lb/hr
	87.14 lb/day
Fabric Collector E4-430:	0.26 lb/hr
	6.17 lb/day
Fabric Collector E4-403:	0.02 lb/hr
	0.43 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 022 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	022	Cement Storage Silo & Loadout Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Cement Storage Silo & Loadout Operation, including following equipment:

- A. Cement Storage Silo System vented to Dust Collector J1-331 and 25 hp Exhaust Fan J1-332, including:
  - 1. One 10,000 ton Cement Silo J1-300 receives cement from Finish Mill Systems; and
  - 2. One 15 hp Silo Aeration Blower J1-310 furnishes aeration air to Cement Silo J1-300.
- B. North Lane Load Out System vented to Dust Collectors J2-205 and J2-215 and two 5 hp Exhaust Fans J2-206 and J2-216, including:
  - 1. One 16 in. Airslide J2-201 from Cement Silo J1-300 to Retractable Spout J2-204 with two-way Spout Positioner J2-203;
  - 2. One 1 hp Retractable Loadout Spout J2-204 from Airslide J2-201 to truck hatch;
  - 3. One 16 in. Airslide J2-211 from Cement Silo J1-300 to Retractable Spout J2-214 with two-way Spout Positioner J2-213;
  - 4. One 1 hp Retractable Load Out Spout J2-214 from Airslide J2-211 to truck hatch;
  - 5. One 3 hp Blower J2-209 furnishes aeration air to Airslide J2-201; and
  - 6. One 3 hp Blower J2-219 furnishes aeration air to Airslide J2-211.
- C. South Lane Load Out System vented to Dust Collectors J2-105 and J2-115 and 5 hp Exhaust Fans J2-106 and J2-116, including:
  - 1. One 16 in. Airslide J2-101 from Cement Silo J1-300 to Retractable Spout J2-104 with two-way Spout Positioner J2-103;
  - 2. One 1 hp Retractable Load Out Spout J2-104 from Airslide J2-101 to truck hatch;
  - 3. One 3 hp Blower J2-109 furnishes aeration air to Airslide J2-101; and
  - 4. One 3 hp Blower J2-119 furnishes aeration air to Airslide J2-111.

**OPERATIONAL CONDITIONS:**

- 1. Visible emission from any source operation shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
- 2. Particulate matter from any source operation shall be no more than 0.1 grains per cubic foot of gas at standard conditions. (Rule 404.1)
- 3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 4. All conveyor transfer points and air slides shall be completely enclosed. (Rule 210.1)
- 5. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)

Emission Unit 022 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM10):**

Fabric Collector J1-331:	0.44 lb/hr
Fabric Collector J2-105:	0.10 lb/hr
Fabric Collector J2-115:	0.10 lb/hr
Fabric Collector J2-205:	0.10 lb/hr
Fabric Collector J2-215:	0.10 lb/hr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 024 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	024	Outdoor Storage & Reclaim Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Outdoor Storage & Reclaim Operation, including following equipment:

- A. One 50 ton capacity limestone Hopper C3-005 discharging onto Conveyor C2-002-BC;
- B. Two Vibrators C2-010-VI and C2-011-VI, less than 1 hp each, for limestone reclaim; and
- C. Outdoor raw material, additives, coal, coke, and clinker storage piles with total aggregate area of 21.5 acres or less.

**OPERATIONAL CONDITIONS:**

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Materials may be stored and reclaimed at rates so as not to exceed emission limits calculated using U.S. EPA AP-42 calculation method or other approved method. (Rule 210.1)
- 3. Material drop heights shall be limited to minimum reasonable height to reduce dusting. (Rules 210.1 BACT Requirement)
- 4. When handling gypsum, coal, or coke, or other raw/additive materials all drop points shall be controlled using water spray providing minimum 80% control of particulates unless material contains minimum 6% moisture when handling. (Rule 210.1 BACT Requirement)
- 5. When handling clinker and limestone, pile shall be watered as needed to minimize dusting during storage and handling. Visible emissions shall be evaluated at source of dust emissions. (Rules 401 and 210.1 BACT Requirement)
- 6. Haul roads shall be watered as necessary to reduce dusting. (Rule 401)
- 7. Compliance with emission limitations shall be verified by maintaining the following records: date, type, and quantity of material transferred to/from outside storage, and moisture content and pile size determined on minimum quarterly basis. (Rule 210.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

Emission Unit 024 Permit Conditions

**Particulate Matter (PM<sub>10</sub>):**

(Fugitive dust from storage piles and handling)	220.20 lb/day
Additional (when crushers, EU 001 and 002, are shutdown)	50.40 lb/day
Additional (when kiln, EU 017, is shutdown)	429.60 lb/day
Additional (when clinker cooler, EU 018, is shutdown)	333.38 lb/day
Additional (when B-3 finish mill, EU 020, is shutdown)	79.34 lb/day
Additional (when B-4 finish mill, EU 021, is shutdown)	127.20 lb/day

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 026 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	026	Quarry Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Quarry Operation, including following equipment:

- A. Piston engine powered quarry drill; and
- B. Piston engine powered quarry drill.

**OPERATIONAL CONDITIONS:**

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)



Emission Unit 027 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	027	Piston Engine with Welder #R5-508

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Piston Engine with Welder #R5-508, including following equipment:

85-bhp gasoline fueled piston engine powering portable welding unit.

**OPERATIONAL CONDITIONS:**

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
4. With exception of emergency standby equipment, if engine is operated at same location within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)

Emission Unit 028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	028	Emergency Use Piston Engine with Generator #M2-101

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Emergency Use Piston Engine with Generator #M2-101, including following equipment:

900-bhp emergency use diesel fueled piston engine powering 750-kW electrical generator

**OPERATIONAL CONDITIONS:**

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
4. Engine operation shall not exceed 200 hours per year or shall be subject to additional permit requirements. (Rules 210.1 and 427)

Emission Unit 030 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	030	Emergency Use Piston Engine with Generator

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Emergency Use Piston Engine with Generator, including following equipment:

755-bhp emergency use diesel fueled piston engine powering electrical generator.

**OPERATIONAL CONDITIONS:**

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
4. Engine operation shall be no more than 200 hours per year (excluding routine maintenance/check startups). (Rule 427)

Emission Unit 032 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	032	Truck-Mounted Vacuum

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Truck-Mounted Vacuum, including following equipment:

250-bhp diesel fueled piston engine powering vacuum truck with baghouse.

**OPERATIONAL CONDITIONS:**

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
4. With exception of emergency standby equipment, if engine is operated at same location within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)

Emission Unit 033 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	033	Primary and Secondary Crusher

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Primary and Secondary Crusher, including following equipment:

- A. Rock Breaker;
- B. Primary Feed Hopper (ID No. B2-003-HP), 200 cubic yard capacity, served by Item Z;
- C. Apron Feeder (ID No. B2-006-AP), 82 in. x 38 ft., driven by 150 hp electric motor;
- D. Spillage Conveyor (ID No. B2-007-DG), 84 in. x 37 ft., driven by 10 hp electric motor;
- E. Hydraulic System (ID No. B2-008-PU), 5000 gpm, driven by 10 hp electric motor;
- F. Vibrating Grizzly (ID No. B2-015-VS), 1200 tph, ventilated by Item J. and driven by 100 hp electric motor;
- G. Belt Conveyor (ID No. B2-200-BC), 48 in. x 90 ft., ventilated by Item J. and driven by 100 hp electric motor;
- H. Impact Crusher (ID No. B2-020-CU), 1000 tph, ventilated by Item J. and driven by 1600 hp electric motor;
- I. Belt Conveyor (ID No. B2-030-BC), 70 in. x 50 ft., ventilated by Item J. and driven by 40 hp electric motor;
- J. Fabric Collector (ID No. B2-120-DC), 11,874 sq. ft. filtering area, 756 bags, 38310 cfm, including:
  - 1. Fabric Collector Fan (ID No. B2-121-FA) driven by 125 hp electric motor,
  - 2. Screw Conveyor (ID No. B2-125-SC), 12 in. dia. x 35 ft., driven by 10 hp electric motor,
  - 3. Rotary Airlock, FT 12 (ID No. B2-126-RA), driven by 3 hp electric motor, and
  - 4. Screw Conveyor (ID No. B2-127-SC), 12 in. x 20 ft., discharging only to Item K. and driven by 3 hp electric motor;
- K. Belt Conveyor (ID No. B2-040-BC), 48 in. x 620 ft., ventilated by Item N. and driven by 75 hp electric motor;
- L. Controlled Feed Bin (ID No. B2-060-BI), 500 tph, ventilated by Item N;
- M. Apron Feeder (ID No. B2-070-AP), 55 in. x 20 ft., ventilated by Item N. and driven by 7.5 hp electric motor;
- N. Fabric Collector (ID No. B2-160-DC), 816 sq. ft. filtering area, 49 bags, 3250 cfm, including:
  - 1. Fabric Collector Fan (ID No. B2-161-FA) driven by 7.5 hp electric motor, and
  - 2. Rotary Airlock, FT 12 (ID No. B2-162-RA), discharging only to Item L. and driven by 1.5 hp electric motor;
- O. Belt Conveyor (ID No. B2-080-BC), 48 in. x 89 ft., ventilated by Item Q. and driven by 15 hp electric motor;
- P. Overland Belt Conveyor (ID No. 200-BC-7) (existing), ventilated by Item Q;
- Q. Fabric Collector (ID No. B2-090-DC), 816 sq. ft. filtering area, 49 bags, 3250 cfm, including:
  - 1. Fabric Collector Fan (ID No. B2-091-FA), driven by 7.5 hp electric motor, and
  - 2. Rotary Airlock, FT 12 (ID No. B2-096-RA), discharging only to Item P. and driven by 1.5 hp electric motor;

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- R. Belt Conveyor (ID No. B2-210-BC), 36 in. x 305 ft., ventilated by Item Y. and driven by 100 hp electric motor;
- S. Vibrating Screen (ID No. B2-220-VS), 950 tph, ventilated by Item Y. and driven by 80 hp electric motor;
- T. Stacker Belt Conveyor (ID No. B2-230-BC), 36 in. x 376 ft., ventilated by Item Y. and discharge served by Item Z. and driven by 100 hp electric motor;
- U. DG Storage Pile;
- V. DG Weigh Feeder (ID No. B2-240-WF), 36 in. x 58 ft., ventilated by Item Y. and driven by 7.5 hp electric motor;
- W. Stacker Belt Conveyor (ID No. B2-250-BC), 36 in. x 333 ft., ventilated by Item Y. and discharge served by Item Z. and driven by 40 hp electric motor;
- X. Strategic Stone Storage Pile;
- Y. Fabric Collector (ID No. B2-320-DC), 5,600 sq. ft. filtering area, 336 bags, 20,000 cfm, including:
  - 1. Fabric Collector Fan (ID No. B2-321-FA), driven by 50 hp electric motor,
  - 2. Screw Conveyor (ID No. B2-325-SC), 12 in. x 14 ft., driven by 10 hp electric motor, and
  - 3. Rotary Airlock, FT 16 (ID No. B2-326-RA), discharging only to Item K. and driven by 2 hp electric motor;
- Z. Water Spray System (ID No. B2-350-WS), powered by water pump, Item AA;
- AA. Water Pump (ID No. B2-355-PU), 1000 gpm, driven by 50 hp electric motor; and
- BB. Dust Collectors/Water Spray System Air Compressor (ID No. B2-803-AC), powered by 50 hp electric motor.

**OPERATIONAL CONDITIONS:**

- 1. Each fabric collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 2. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with U. S. EPA test methods, i.e. capped sample ports in accessible location of uniform flow. (Rule 108.1)
- 3. Fabric collector, related piping, and connections shall be maintained dust-tight; i.e. equipment shall be maintained so as not to allow fugitive emissions. (Rules 209 and 210.1)
- 4. Screw conveyors and belt conveyors shall be covered while operational. (Rule 210.1 BACT Requirement)
- 5. Visible emissions from fabric collector stacks and conveyors, including storage pile conveyor discharge points, shall not exceed 5% opacity. (Rules 210.1 BACT Requirement and 422, 40 CFR Part 60 Subpart OOO)
- 6. Particulate matter emission concentration from each fabric collector exhaust stack shall not exceed 0.01 gr/scf. (Rules 210.1 BACT Requirement and 422, 40 CFR Part 60 Subpart OOO)
- 7. Material removed from each fabric collector and other collected fines shall be returned to product stream or otherwise disposed of using a method preventing entrainment in atmosphere. (Rules 210.1 and 210.1 BACT Requirement)
- 8. Each fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 9. Visible emissions generated by front-end loaders adding material into primary feed hopper shall not exceed 15% opacity. (Rule 422, 40 CFR Part 60 Subpart OOO)
- 10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

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11. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422)
12. Air Pollution Control Officer (APCO) or any authorized representative shall have access to and copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation or method required in this permit, and to sample, or require sampling, of emissions from source. (Rule 107)
13. Upon full implementation of this Authority to Construct (ATC), EU 001 and 002 shall be cancelled and corresponding equipment (not utilized for ATC) taken out of service and rendered inoperable. (Rule 210.1)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request or initial use of equipment. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector B2-120-DC:	0.01 gr/dscf
	3.22 lb/hr
	77.32 lb/day
	14.11 ton/yr
Fabric Collector B2-320-DC:	0.01 gr/dscf
	1.68 lb/hr
	40.37 lb/day
	7.37 ton/yr
Fabric Collector B2-160-DC:	0.01 gr/dscf
	0.27 lb/hr
	6.56 lb/day
	1.20 ton/yr
Fabric Collector B2-090-DC:	0.01 gr/dscf
	0.17 lb/hr
	4.04 lb/day
	0.74 ton/yr

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Crushing, Transfer, and Loading:	0.26 lb/hr
	6.29 lb/day
	1.15 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

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Emission Unit 036 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	036	Vacuum Truck #2

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Vacuum Truck #2, including following equipment:

Vacuum truck with 250-bhp diesel piston engine, 60B70 in. long filter bags, and dual hydraulic fans with maximum vacuum pressure of 27 inches of mercury (in. Hg).

**OPERATIONAL CONDITIONS:**

1. Vacuum truck collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Vacuum truck collector shall all be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Particulate matter emissions from vacuum truck collector exhaust shall not exceed 0.01 gr/scf. (Rule 210.1)
4. Vacuum truck collector shall have no visible emissions other than water vapor. (Rule 210.1)
3. Vacuum truck collector volumetric exhaust flow rate shall not exceed 5,250 standard cubic feet per minute (scfm). (Rule 210.1)
5. Vacuum truck collector shall be in operation when associated equipment is operated. (Rule 210.1)
6. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
7. Material collected in vacuum truck collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
8. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
10. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with vacuum truck collector exhaust emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 209)

Emission Unit 036 Permit Conditions

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant for this emission unit shall not exceed following limits:

<b><u>Particulate Matter (PM<sub>10</sub>):</u></b>	0.45 lb/hr
	3.60 lb/day
	0.66 tons/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

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Emission Unit 040 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	040	Quarry Drilling Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Quarry Drilling Operation, including following equipment:

- A. Primary quarry drill powered by item B; and
- B. 305-bhp diesel fueled piston engine equipped with turbocharger and after-cooled and crankcase ventilation;

**OPERATIONAL CONDITIONS:**

- 1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
- 2. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
- 3. Engine shall be equipped with crankcase vent control device. (Rule 210.1 BACT Requirement)
- 4. Operation of subject drill shall not exceed 2,500 hours per year without prior District approval. (Rule 210.1)
- 5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
- 6. Visible emissions from engine driving drill shall not exceed Ringelmann No. ¼ or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
- 7. Visible emissions from drilling operation shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 8. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 9. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
- 10. Work area and quarry site shall be maintained in damp condition with use of water sprays to prevent fugitive dust emissions. (Rules 401 and 402)
- 11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
- 12. Owner/operator shall not cause or allow fugitive dust emissions from any active operations, except unpaved roads, to remain visible in atmosphere beyond property line. (Rule 402)
- 13. Owner/operator shall utilize one or more Reasonably Available Control Measures (RACM) to minimize fugitive dust emissions from any active operations, including unpaved roads. (Rule 402)
- 14. Owner/ operator shall submit/have a current fugitive dust plan on file in District office. (Rule 402)
- 15. If engine is operated at same location, i.e. specific drilling location, within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)

Emission Unit 040 Permit Conditions

16. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s), and check(s). (Rules 209 and 210.1)
17. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Primary Drill Engine**

**Particulate Matter (PM<sub>10</sub>):**

0.15 g/bhp-hr (Title 17 CCR 93116)  
0.10 lb/hr  
1.62 lb/day  
0.12 ton/yr

**Sulfur Oxides (as SO<sub>2</sub>):**

0.00 lb/hr  
0.05 lb/day  
0.004 ton/yr

**Oxides of Nitrogen (as NO<sub>2</sub>):**

3.00 g/bhp-hr (BACT)  
2.02 lb/hr  
32.27 lb/day  
2.38 ton/yr

**Volatile Organic Compounds (VOC):**

0.67 lb/hr  
10.75 lb/day  
0.79 ton/yr

**Carbon Monoxide (CO):**

2.35 lb/hr  
37.65 lb/day  
2.78 ton/yr

Emission Unit 040 Permit Conditions

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

**Secondary Drill Engine**

**Particulate Matter (PM<sub>10</sub>):** 0.40 g/bhp-hr (Title 17 CCR 93116)  
0.53 lb/hr  
8.46 lb/day  
0.32 ton/yr

**Sulfur Oxides (as SO<sub>2</sub>):** 0.10 lb/hr  
1.58 lb/day  
0.01 ton/yr

**Oxides of Nitrogen (as NO<sub>2</sub>):** 6.90 g/bhp-hr (BACT)  
9.13 lb/hr  
146.03 lb/day  
5.48 ton/yr

**Volatile Organic Compounds (VOC):** 1.32 lb/hr  
21.17 lb/day  
0.79 ton/yr

**Carbon Monoxide (CO):** 11.24 lb/hr  
179.89 lb/day  
6.75 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 041 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	041	Aboveground Gasoline Storage & Dispensing Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Aboveground Gasoline Storage & Dispensing Operation, including following equipment:

- A. One 4,000 gallon Fireguard aboveground gasoline storage tank (G-70-162) with one nozzle, one dispenser and permanently affixed fill tube terminating no more than six inches from bottom of each gasoline storage chamber and provisions for collection of gasoline vapors during filling;
- B. One 12,000 gallon aboveground diesel storage tank with one nozzle, one dispenser, one satellite dispenser, and permanently affixed fill tube terminating no more than six inches from bottom of each gasoline storage chamber and provisions for collection of gasoline vapors during filling (exempt);
- C. Phase I (Filling of storage tank) vapor collection system certified by Executive Order G-70-97-A and G-70-52-AM including:
  - 1. Liquid fill adaptor;
  - 2. Liquid fill cap;
  - 3. Vapor adaptor;
  - 4. Pressure/vacuum relief valve;
  - 5. Overfill protection;
- D. Phase II (Refueling of motor vehicles) gasoline balance vapor control system certified by Executive Order G-70-97-A and G-70-52-AM, including:
  - 1. Nozzle;
  - 2. Swivel;
  - 3. Flow Limiter;
  - 4. Vapor check valve;
  - 5. Coaxial hose;
  - 6. Breakaway Fitting; and
  - 7. Dispenser.

**OPERATIONAL CONDITIONS:**

- 1. Maximum annual throughput shall not exceed 30,000 gallons per year without prior District approval and re-determination of required source testing. (Rule 210.1)
- 2. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rules 209, 411, 412 and 412.1)
- 3. Any tank gauging or sampling device on a tank vented to a vapor recovery system shall be equipped with gas-tight cover closed at all times except during gauging or sampling. (Rule 411)
- 4. All lines, fittings, adapters, caps, and connections shall be maintained leak-free. (Rules 411 and 412.1)

Emission Unit 041 Permit Conditions

5. Tank shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
6. Vapor control system shall be of California Air Resources Board (CARB) certified design and installed, operated and maintained in accordance with manufacturer's recommendation to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 209, 411, and 412)
7. Gasoline storage and dispensing equipment shall comply with applicable codes and regulations, including safety, fire, weights and measures, etc. (Rules 412 and 412.1)
8. Any tank with vapor recovery system having defect shall not be operated until defect has been repaired, replaced or adjusted as necessary to correct defect, and District has inspected the system or has authorized its use pending inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412.1)
9. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 209)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**SPECIAL CONDITION:**

- aa.) System and components shall be of California Air Resources Board "certified" design, any component changes shall be approved in advance by District. (Rule 412)
- bb.) Equipment shall be tested annually according to Vapor Recovery Test Procedure TP 201.1E, Leak Rate and Cracking Pressure of Pressure/Vacuum Vent Valves. Throughput shall be reported along with test results. (Rules 209, 411 and 412.1)
- cc.) Equipment shall be tested annually according to Vapor Recovery Test Procedure TP 201.1B, Static Pressure Decay Test Throughput shall be reported along with test results. (Rules 209, 411 and 412.1)

Emission Unit 055 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	042	Kiln Fabric Collector Fabric Transfer System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Kiln Fabric Collector Fabric Transfer System, including following equipment:

- A. Two Pneumatic Flow-Control Gates (S4-221-GA and S4-241-GA);
- B. Two Dosing Bins (S4-222-BI and S4-241-BI);
- C. Two Rotary Feeders (S4-223-RF and S4-243-RF) each with 2.9-hp motor;
- D. Two Air Slides (S4-224-AS and S4-244-AS);
- E. Two IBAU Material Pumps (S4-225-FK and S4-245-FK) each with 29.5-hp motor;
- F. Two Circulating Oil Pumps (S4-227-PU and S4-247-PU) each with 0.6-hp motor; and
- G. Two Rotary Piston Blowers (S4-226-BL and S4-246-BL) each with 88.5-hp motor.

**OPERATIONAL CONDITIONS:**

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Particulate matter emissions from fabric collector r exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 4. Visible emissions from fabric collectors E3-385-DC (associated with EU 020) and E4-410-DC (associated with EU 021) shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
- 5. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 6. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 7. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
- 8. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 11. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)



Emission Unit 042 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed following limits:

**Particulate Matter (PM<sub>10</sub>):**

Fabric Collector E3-385-DC: (Listed on EU 020)	0.01	gr/scf (Rule 210.1 BACT Requirement)
	4.01	lb/hr
	96.27	lb/day
	17.87	tons/yr

Fabric Collector E4-410-DC: (Listed on EU 021)	0.01	gr/scf (Rule 210.1 BACT Requirement)
	3.36	lb/hr
	87.14	lb/day
	150.22	tons/yr

(Emissions limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 044 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	044	Quarry Drilling Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Quarry Drilling Operation, including following equipment:

- A. Quarry drill powered with 600-bhp diesel fueled piston engine equipped with turbocharger and aftercooled and crankcase ventilation.

**OPERATIONAL CONDITIONS:**

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Engine shall be equipped with after-cooled (intercooled) turbocharger. (Rule 210.1 BACT Requirement)
3. Engine shall be equipped with crankcase vent control device. (Rule 210.1 BACT Requirement)
4. Operation of subject drill shall not exceed 1200 hours per year without prior District approval. (Rule 210.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
6. Visible emissions from engine driving drill shall not exceed Ringelmann No. ¼ or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
7. Visible emissions from drilling operation shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
8. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
9. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO<sub>2</sub>). (Rule 407)
10. Work area and quarry site shall be maintained in damp condition with use of water sprays to prevent fugitive dust emissions. (Rules 401 and 402)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
12. Owner/operator shall not cause or allow fugitive dust emissions from any active operations, except unpaved roads, to remain visible in atmosphere beyond property line. (Rule 402)
13. Owner/operator shall utilize one or more Reasonably Available Control Measures (RACM) to minimize fugitive dust emissions from any active operations, including unpaved roads. (Rule 402)
14. Owner/ operator shall submit/have a current fugitive dust plan on file in District office. (Rule 402)
15. If engine is operated at same location, i.e. specific drilling location, within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)
16. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s), and check(s). (Rules 209 and 210.1)

Emission Unit 044 Permit Conditions

17. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from this emission unit shall not exceed following limits:

**Drill Engine**

**Particulate Matter (PM10):**

0.40 g/bhp-hr (Title 17 CCR 93116)  
0.53 lb/hr  
8.46 lb/day  
0.32 ton/yr

**Sulfur Oxides (SOx as SO<sub>2</sub>):**

0.10 lb/hr  
1.58 lb/day  
0.01 ton/yr

**Oxides of Nitrogen (NOx as NO<sub>2</sub>):**

6.9 g/bhp-hr (BACT)  
9.13 lb/hr  
146.03 lb/day  
5.48 ton/yr

**Volatile Organic Compounds (VOC):**  
**(As defined in Rule 210.1)**

1.32 lb/hr  
21.17 lb/day  
0.79 ton/yr

**Carbon Monoxide (CO):**

11.24 lb/hr  
179.89 lb/day  
6.75 ton/yr

(Emission limits established pursuant to Rule 210.1, unless otherwise noted.)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 045 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1147	045	Alternative Fuel Storage & Cement Processing

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Alternative Fuel Storage & Cement Processing, including following equipment:

1. Docking Station;
2. 2 - Stationary Mechanical Transport (15 HP each);
3. Fuel Dis-Agglomerator (15 HP);
4. Enclosed Hopper (15 HP);
5. 6 - Screw Feeders (3 HP each);
6. Dosing Screw (7.4 HP);
7. Rotary Feeder (10 HP);
8. Pneumatic Feed Line;
9. Pneumatic Blower (150 HP); and
10. 4,415 cfm Dust Collector (15 HP).

**OPERATIONAL CONDITIONS:**

1. Screw feeders must be enclosed. (Rule 210.1 BACT requirement)
2. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
3. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
4. Particulate matter emissions from fabric collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
5. Visible emissions from fabric collector shall not exceed 5% opacity (1/4 Ringelmann). (Rule 210.1 BACT Requirement)
6. Fabric collector volumetric flow rate shall not exceed 4,415 cubic feet per minute. (Rule 210.1)
7. All piping, ducting and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
8. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
9. Material collected in fabric dust collectors shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)
10. Equipment shall be maintained according to manufacturer's specifications. (Rule 210.1)
11. No emission shall cause injury, detriment, nuisance, or annoyance or endanger the comfort, repose, health or safety of any persons or have natural tendency to cause injury or damage to business or property. (Rule 402)
12. Lehigh Southwest Cement Company shall keep accurate daily records of alternative fuel loaded into docking station and make such records readily available to District upon request. (Rule 210.1)
13. Seals shall be maintained leak free. (Rule 210.1)
14. Emissions from docking station and feeders exhaust shall not exceed 20% opacity. (Rule 210.1 BACT requirement)

**STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:**

Facility shall comply with California Health and Safety Code Sections 44300 through 44384. (Rule 208.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

**EMISSION LIMITS:**

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<b><u>Particulate Matter (PM<sub>10</sub>):</u></b>	0.38 lb/hr
(Dust Collector @ 4,415 cfm)	6.05 lb/day
	1.59 ton/year

(Emissions limits established pursuant to Rule 210.1 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of five years. (Rule 201.1, 209 and 210.1)

**FEDERAL REGULATIONS  
40 CFR PART 60 SUBPART F**

**Standards of Performance for Portland Cement Plants**

**Particulate matter limits for kilns constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008. 40 CFR 60.62(a)(1)(i)**

Subject Emission Units Permit Number	All equipment listed in the following permits: 1147009, 1147013, 1147014, 1147015, 1147016, 1147017, 1147018, 1147019, 1147020, 1147021, and 1147022.
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**Standard**

<b>§60.62(a)</b>	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any kiln any gases which:
<b>§60.62(a)(1)</b>	Contain particulate matter (PM) in excess of:  (i) 0.30 pound per ton of feed (dry basis) to the kiln if construction, reconstruction, or modification of the kiln commences after August 17, 1971 but on or before June 16, 2008.
<b>§60.62(b)</b>	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any clinker cooler any gases which:
<b>§60.62(b)(4)</b>	If the kiln has a separate alkali bypass stack, you must combine the PM emissions from the bypass stack with the PM emissions from the main kiln exhaust to determine total PM emissions.

**Monitoring, Testing, Recordkeeping, and Reporting**

<b>§60.63(b)</b>	<i>Clinker production monitoring requirements.</i> For any kiln subject to an emissions limitation on PM, NO <sub>x</sub> , or SO <sub>2</sub> emissions (lb/ton of clinker), you must:
<b>§60.63(b)(1)</b>	(1) Determine hourly clinker production by one of two methods:  (i) 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. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy.  (ii) 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. 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 determined for accounting purposes and recorded feed rates. This ratio should be updated 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;
<b>§60.63(b)(2)</b>	Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker or feed production before initial use (for new sources) or within 30 days of the effective date of this rule (for existing sources). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker or feed production.
<b>§60.63(b)(4)</b>	Develop an emissions monitoring plan in accordance with paragraphs (i)(1) through (i)(4) of this section.

**§60.63(h)**

You must install, operate, calibrate, and maintain instruments for continuously measuring and recording the pollutant per mass flow rate to the atmosphere for each kiln subject to the PM emissions limits in §60.62(a)(1)(i) and (ii), the NO<sub>x</sub> emissions limit in §60.62(a)(3), or the SO<sub>2</sub> emissions limit in §60.62(a)(4) according to the requirements in paragraphs (h)(1) through (10) of this section.

(1) The owner or operator 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 NO<sub>x</sub>, SO<sub>2</sub> or PM 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.

(2) The flow rate monitoring system must be designed to measure the exhaust gas 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 gas flow rate.

(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate.

(4) 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 (h)(2) of this section.

(5) 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.

(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.

(7) 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 part 60 of this chapter for a discussion of CD).

(i) 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).

(ii) 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.

(8) 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 noted in paragraphs (h)(8)(i) and (ii).

(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.

(ii) 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.

(9) 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 (h)(8).

(10) 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).

<p><b>§60.63(i)</b></p>	<p><i>Development and Submittal (Upon Request) of Monitoring Plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (i)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (h) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph §63.1350(m)(10) of this chapter.</p>
	<p>(1) 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 (i)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation of your CMS.</p> <p>(i) Installation of the CEMS 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);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p>
<p><b>§60.64(a)</b></p>	<p>In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).</p>
<p><b>§60.64(b)</b></p>	<p>Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63.</p>
<p><b>§60.64(b)(1)</b></p>	<p>The PM emissions rate is calculated using Equation 2 of this section:</p> $E = (C_s Q_s) / (PK) \quad (\text{Eq. 2})$ <p>Where:</p> <p>E = emission rate of particulate matter, lb/ton of kiln feed;</p> <p>C<sub>s</sub> = concentration of particulate matter, gr/scf;</p> <p>Q<sub>s</sub> = volumetric flow rate of effluent gas, where C<sub>s</sub> and Q<sub>s</sub> are on the same basis (either wet or dry), dscf/hr;</p> <p>P = total kiln feed (dry basis) rate, ton/hr. For kilns constructed, modified or reconstructed on or after June 16, 2008,</p> <p>p = total kiln clinker production rate; and</p> <p>K = conversion factor, 7000 gr/lb.</p>
<p><b>§60.64(b)(2)</b></p>	<p>Suitable methods shall be used to determine the kiln feed rate (P), except fuels.</p>



<p><b>§60.64(b)(5)</b></p>	<p>If your kiln is not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60, and the kiln (including any associated alkali bypass and clinker cooler) was constructed, modified or reconstructed on or after June 16, 2008, you must conduct a performance test every 5 years following the initial performance test. Kilns (including any associated alkali bypass and clinker cooler) constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 must conduct a performance test every 5 years if not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60.</p>
<p><b>§63.1350(m)(10)</b></p>	<p><i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system 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.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p>

**Recordkeeping**

<p><b>§60.63(b)(3)</b></p>	<p>Record the daily clinker production rates and kiln feed rates.</p>
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**Reporting**

<p><b>§60.64(d)</b></p>	<p>As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) ( <i>see</i> <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.html/">http://www.epa.gov/ttn/chief/ert/ert_tool.html/</a> ).</p>
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**Opacity limits for kilns constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 that do not use a PM continuous emissions monitoring system (CEMS). §60.62(a)(2)**

**Standard**

§60.62(a)	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any kiln any gases which:
§60.62(a)(2)	Exhibit greater than 20 percent opacity, except that this opacity limit does not apply to any kiln subject to a PM limit in paragraph (a)(1) of this section that uses a PM continuous emissions monitoring system (CEMS).

**Monitoring and Testing**

§60.64(a)	In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
§60.64(b)	Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63.
§60.64(b)(3)	Method 9 and the procedures in §60.11 must be used to determine opacity.

**Particulate matter limits for clinker coolers constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008. §60.62(b)(1)(i)**

**Standard**

§60.62(b)	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any clinker cooler any gases which:
§60.62(b)(1)	<p>1) Contain PM in excess of:</p> <p>(i) 0.10 pound per ton of feed (dry basis) to the kiln if construction, reconstruction, or modification of the clinker cooler commenced after August 17, 1971 but on or before June 16, 2008.</p> <p>(ii) 0.01 pound per ton of clinker on a 30-operating day rolling average if construction, reconstruction, or modification of the clinker cooler commences after June 16, 2008. An operating day includes all valid data obtained in any daily 24-hour period during which the kiln operates, and excludes any measurements made during the daily 24-hour period when the kiln was not operating.</p>

**Monitoring, Testing, Recordkeeping, and Reporting**

§60.63(i)	<p><i>Development and Submittal (Upon Request) of Monitoring Plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (i)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (h) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph §63.1350(m)(10) of this chapter.</p> <p>(1) 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 (i)(1)(i)</p>
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	<p>through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation of your CMS.</p> <p>(i) Installation of the CEMS 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);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p>
<p><b>§60.64(a)</b></p>	<p>In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).</p>
<p><b>§60.64(b)</b></p>	<p>Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63.</p>
<p><b>§60.64(b)(5)</b></p>	<p>If your kiln is not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60, and the kiln (including any associated alkali bypass and clinker cooler) was constructed, modified or reconstructed on or after June 16, 2008, you must conduct a performance test every 5 years following the initial performance test. Kilns (including any associated alkali bypass and clinker cooler) constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 must conduct a performance test every 5 years if not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60.</p>
<p><b>§63.1350(m)(10)</b></p>	<p><i>Parameter monitoring requirements.</i> If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.</p> <p>(10) <i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system 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.</p>

	<p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p>
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**Reporting**

<b>§60.64(d)</b>	As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) ( <i>see</i> <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.html/">http://www.epa.gov/ttn/chief/ert/ert_tool.html/</a> ).
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**Opacity limits for clinker coolers constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 that do not use a PM continuous emissions monitoring system (CEMS).**

**§60.62(b)(2)**

**Standard**

<b>§60.62(b)</b>	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any clinker cooler any gases which:
<b>§60.62(b)(2)</b>	Exhibit 10 percent opacity, or greater, except that this opacity limit does not apply to any clinker cooler subject to a PM limit in paragraph (b)(1) of this section that uses a PM CEMS.

**Monitoring and Testing**

<b>§60.64(a)</b>	In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
<b>§60.64(b)</b>	Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63.
<b>§60.64(b)(3)</b>	(3) Method 9 and the procedures in §60.11 must be used to determine opacity.

**Opacity limits for raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems. §60.62(c)**

**Standard**

§60.62(c)	On and after the date on which the performance test required to be conducted by §60.8 is completed, 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.
§63.1350(f)(3)	<i>Corrective actions.</i> If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

**Monitoring, Testing, Recordkeeping, and Reporting**

§60.64(a)	In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
§60.64(b)	Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63.
§60.64(b)(3)	Method 9 and the procedures in §60.11 must be used to determine opacity.
§60.64(b)(4)	Any sources other than kilns (including associated alkali bypass and cooler) subject to the 10 percent opacity limit must follow the appropriate monitoring procedures in §63.1350(f), (m)(1) through (4), (m)(10) through (11), (o), and (p) of this chapter.
§63.1350(f)	<i>Opacity monitoring requirements.</i> If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of this section and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of this section and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of this section.
§63.1350(f)(1)(i)	You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.
§63.1350(f)(1)(ii)	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.
§63.1350(f)(1)(iii)	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.

<p><b>§63.1350(f)(1)(iv)</b></p>	<p>If visible emissions are observed during any Method 22 performance test, of appendix A-7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.</p>
<p><b>§63.1350(f)(1)(v)</b></p>	<p>The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. 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.</p>
<p><b>§63.1350(f)(1)(vi)</b></p>	<p>If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A-7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.</p>
<p><b>§63.1350(f)(1)(vii)</b></p>	<p>If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section 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.</p>
<p><b>§63.1350(f)(2)(i)</b></p>	<p>For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes.</p>
<p><b>§63.1350(f)(2)(ii)</b></p>	<p>Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.</p>
<p><b>§63.1350(f)(2)(iii)</b></p>	<p>If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (a)(5)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (a)(5)(i) of the section, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes.</p>
<p><b>§63.1350(f)(4)</b></p>	<p>The requirements under paragraph (f)(2) of this section to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).</p>
<p><b>§63.1350(f)(4)(i)</b></p>	<p>If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.</p>
<p><b>§63.1350(f)(4)(ii)</b></p>	<p>If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply.</p>
<p><b>§63.1350(m)</b></p>	<p><i>Parameter monitoring requirements.</i> If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.</p>

<p><b>§63.1350(m)(1)</b></p>	<p>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.</p>
<p><b>§63.1350(m)(2)</b></p>	<p>You must conduct all monitoring in continuous operation at all times that the unit is operating.</p>
<p><b>§63.1350(m)(3)</b></p>	<p>Determine the 3-hour block average of all recorded readings.</p>
<p><b>§63.1350(m)(4)</b></p>	<p>Record the results of each inspection, calibration, and validation check.</p>
<p><b>§63.1350(m)(10)</b></p>	<p><i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system 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.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p>
<p><b>§63.1350(m)(11)</b></p>	<p>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:</p> <p>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</p> <p>(ii) Sealing off defective bags or filter media;</p> <p>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</p> <p>(iv) Sealing off a defective fabric filter compartment;</p> <p>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</p> <p>(vi) Shutting down the process producing the PM emissions.</p>

<p><b>§63.1350(o)</b></p>	<p><i>Alternate monitoring requirements approval.</i> You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.</p>
<p><b>§63.1350(o)(2)</b></p>	<p>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.</p>
<p><b>§63.1350(o)(3)</b></p>	<p>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 (m)(3)(i) through (iii) of this section:</p> <p>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;</p> <p>(ii) 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</p> <p>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.</p>
<p><b>§63.1350(p)</b></p>	<p><i>Development and submittal (upon request) of monitoring plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (n) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (o)(5) of this section.</p>
<p><b>§63.1350(p)(1)</b></p>	<p>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 (o)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.</p> <p>(i) 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);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p>
<p><b>§63.1350(p)(2)</b></p>	<p>In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p>
<p><b>§63.1350(p)(3)</b></p>	<p>You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p>



<b>§63.1350(p)(4)</b>	You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.
<b>§63.1350(p)(5)</b>	<p><i>BLDS monitoring plan.</i> Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;</p> <ul style="list-style-type: none"><li>(i) Installation of the BLDS;</li><li>(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;</li><li>(iii) Operation of the BLDS, including quality assurance procedures;</li><li>(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;</li><li>(v) How the BLDS output will be recorded and stored.</li></ul>

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**FEDERAL REGULATIONS  
40 CFR PART 60 SUBPART Y**

**Standards of Performance for Coal Preparation and Processing Plants**

Subject Emission Units Permit Number	All equipment listed in the following permits: 1147016
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**Standards for thermal dryers**

<b>§60.252(a)</b>	On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified on or before April 28, 2008, subject to the provisions of this subpart must meet the requirements in paragraphs (a)(1) and (a)(2) of this section.
<b>§60.252(a)(1)</b>	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)); and
<b>§60.252(a)(2)</b>	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.
<b>§60.252(b)</b>	Except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after April 28, 2008, subject to the provisions of this subpart must meet the applicable standards for PM and opacity, as specified in paragraph (b)(1) of this section. In addition, and except as provided in paragraph (c) of this section, on and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of a thermal dryer constructed, reconstructed, or modified after May 29, 2009, subject to the provisions of this subpart must also meet the applicable standards for sulfur dioxide (SO <sub>2</sub> ), and combined nitrogen oxides (NO <sub>x</sub> ) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section.
<b>§60.252(b)(1)</b>	<p>The owner or operator must meet the requirements for PM emissions in paragraphs (b)(1)(i) through (iii) of this section, as applicable to the affected facility.</p> <p>(i) For each thermal dryer constructed or reconstructed after April 28, 2008, the owner or operator must meet the requirements of (b)(1)(i)(A) and (b)(1)(i)(B).</p> <p style="padding-left: 40px;">(A) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that contain PM in excess of 0.023 g/dscm (0.010 grains per dry standard cubic feet (gr/dscf)); and</p> <p style="padding-left: 40px;">(B) The owner or operator must not cause to be discharged into the atmosphere from the thermal dryer any gases that exhibit 10 percent opacity or greater.</p> <p>(ii) For each thermal dryer modified after April 28, 2008, the owner or operator must meet the requirements of paragraphs (b)(1)(ii)(A) and (b)(1)(ii)(B) of this section.</p> <p style="padding-left: 40px;">(A) The owner or operator must not cause to be discharged to the atmosphere from the affected facility any gases which contain PM in excess of 0.070 g/dscm (0.031 gr/dscf); and</p> <p style="padding-left: 40px;">(B) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 20 percent opacity or greater.</p>

<p><b>§60.252(b)(2)</b></p>	<p>Except as provided in paragraph (b)(2)(iii) of this section, for each thermal dryer constructed, reconstructed, or modified after May 27, 2009, the owner or operator must meet the requirements for SO<sub>2</sub> emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.</p> <p>(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or</p> <p>(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain SO<sub>2</sub> in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain SO<sub>2</sub> in excess of 10 percent of the potential combustion concentration (<i>i.e.</i>, the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate of 1.2 lb/MMBtu (520 ng/J)).</p> <p>(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to an SO<sub>2</sub> limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input are not subject to the SO<sub>2</sub> limits of this section.</p>
<p><b>§60.252(b)(3)</b></p>	<p>Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined NO<sub>x</sub> and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.</p> <p>(i) For each thermal dryer constructed after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain a combined concentration of NO<sub>x</sub> and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.</p> <p>(ii) For each thermal dryer reconstructed or modified after May 27, 2009, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which contain combined concentration of NO<sub>x</sub> and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.</p> <p>(iii) Thermal dryers that receive all of their thermal input from a source other than coal or residual oil, that receive all of their thermal input from a source subject to a NO<sub>x</sub> limit and/or CO limit under another subpart of this part, or that use waste heat or residual from the combustion of coal or residual oil as their only thermal input, are not subject to the combined NO<sub>x</sub> and CO limits of this section.</p>
<p><b>§60.252(c)</b></p>	<p>Thermal dryers receiving all of their thermal input from an affected facility covered under another 40 CFR Part 60 subpart must meet the applicable requirements in that subpart but are not subject to the requirements in this subpart.</p>

**Standards for Pneumatic Coal-cleaning Equipment**

<p><b>§60.253(a)</b></p>	<p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified on or before April 28, 2008, must meet the requirements of paragraphs (a)(1) and (a)(2) of this section.</p> <p>(1) 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); and</p> <p>(2) 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.</p>
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<p><b>§60.253(b)</b></p>	<p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of pneumatic coal-cleaning equipment constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) and (b)(2) of this section.</p> <p>(1) 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 0.023 g/dscm (0.010 gr/dscf); and</p> <p>(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that exhibit greater than 5 percent opacity.</p>
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**Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.**

<p><b>§60.254(a)</b></p>	<p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an 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 constructed, reconstructed, or modified on or before April 28, 2008, gases which exhibit 20 percent opacity or greater.</p>
<p><b>§60.254(b)</b></p>	<p>On and after the date on which the performance test is conducted or required to be completed under §60.8, whichever date comes first, an owner or operator of any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal constructed, reconstructed, or modified after April 28, 2008, must meet the requirements in paragraphs (b)(1) through (3) of this section, as applicable to the affected facility.</p> <p>(1) Except as provided in paragraph (b)(3) of this section, the owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases which exhibit 10 percent opacity or greater.</p> <p>(2) The owner or operator must not cause to be discharged into the atmosphere from any mechanical vent on an affected facility gases which contain particulate matter in excess of 0.023 g/dscm (0.010 gr/dscf).</p> <p>(3) Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the opacity limitations of paragraph (b)(1) of this section.</p>
<p><b>§60.254(c)</b></p>	<p>The owner or operator of an open storage pile, which includes the equipment used in the loading, unloading, and conveying operations of the affected facility, constructed, reconstructed, or modified after May 27, 2009, must prepare and operate in accordance with a submitted fugitive coal dust emissions control plan that is appropriate for the site conditions as specified in paragraphs (c)(1) through (6) of this section.</p>
<p><b>§60.254(c)(1)</b></p>	<p>The fugitive coal dust emissions control plan must identify and describe the control measures the owner or operator will use to minimize fugitive coal dust emissions from each open storage pile.</p>
<p><b>§60.254(c)(2)</b></p>	<p>For open coal storage piles, the fugitive coal dust emissions control plan must require that one or more of the following control measures be used to minimize to the greatest extent practicable fugitive coal dust: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents on the source (when the provisions of paragraph (c)(6) of this section are met), use of a wind barrier, compaction, or use of a vegetative cover. The owner or operator must select, for inclusion in the fugitive coal dust emissions control plan, the 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.</p>

<p><b>§60.254(c)(3)</b></p>	<p>Any owner or operator of an affected facility that is required to have a fugitive coal dust emissions control plan may petition the Administrator to approve, for inclusion in the plan for the affected facility, alternative control measures other than those specified in paragraph (c)(2) of this section as specified in paragraphs (c)(3)(i) through (iv) of this section.</p> <p>(i) The petition must include a description of the alternative control measures, a copy of the fugitive coal dust emissions control plan for the affected facility that includes the alternative control measures, and information sufficient for EPA to evaluate the demonstrations required by paragraph (c)(3)(ii) of this section.</p> <p>(ii) The owner or operator must either demonstrate that the fugitive coal dust emissions control plan that includes the alternate control measures will provide equivalent overall environmental protection or demonstrate that it is either economically or technically infeasible for the affected facility to use the control measures specifically identified in paragraph (c)(2).</p> <p>(iii) While the petition is pending, the owner or operator must comply with the fugitive coal dust emissions control plan including the alternative control measures submitted with the petition. Operation in accordance with the plan submitted with the petition shall be deemed to constitute compliance with the requirement to operate in accordance with a fugitive coal dust emissions control plan that contains one of the control measures specifically identified in paragraph (c)(2) of this section while the petition is pending.</p> <p>(iv) If the petition is approved by the Administrator, the alternative control measures will be approved for inclusion in the fugitive coal dust emissions control plan for the affected facility. In lieu of amending this subpart, a letter will be sent to the facility describing the specific control measures approved. The facility shall make any such letters and the applicable fugitive coal dust emissions control plan available to the public. If the Administrator determines it is appropriate, the conditions and requirements of the letter can be reviewed and changed at any point.</p>
<p><b>§60.254(c)(4)</b></p>	<p>The owner or operator must submit the fugitive coal dust emissions control plan to the Administrator or delegated authority as specified in paragraphs (c)(4)(i) and (c)(4)(ii) of this section.</p> <p>(i) The plan must be submitted to the Administrator or delegated authority prior to startup of the new, reconstructed, or modified affected facility, or 30 days after the effective date of this rule, whichever is later.</p> <p>(ii) The plan must be revised as needed to reflect any changing conditions at the source. Such revisions must be dated and submitted to the Administrator or delegated authority before a source can operate pursuant to these revisions. The Administrator or delegated authority may also object to such revisions as specified in paragraph (c)(5) of this section.</p>
<p><b>§60.254(c)(5)</b></p>	<p>The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section.</p> <p>(i) The Administrator or delegated authority may object to any fugitive coal dust emissions control plan that it has determined does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.</p> <p>(ii) If an objection is raised, the owner or operator, within 30 days from receipt of the objection, must submit a revised fugitive coal dust emissions control plan to the Administrator or delegated authority. The owner or operator must operate in accordance with the revised fugitive coal dust emissions control plan. The Administrator or delegated authority retain the right, under paragraph (c)(5) of this section, to object to the revised control plan if it determines the plan does not meet the requirements of paragraphs (c)(1) and (c)(2) of this section.</p>

<b>§60.254(c)(6)</b>	Where appropriate chemical dust suppression agents are selected by the owner or operator as a control measure to minimize fugitive coal dust emissions, (1) only chemical dust suppressants with Occupational Safety and Health Administration (OSHA)-compliant material safety data sheets (MSDS) are to be allowed; (2) the MSDS must be included in the fugitive coal dust emissions control plan; and (3) the owner or operator must consider and document in the fugitive coal dust emissions control plan the site-specific impacts associated with the use of such chemical dust suppressants.
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**Performance Tests and Other Compliance Requirements**

<b>§60.255(a)</b>	An owner or operator of each affected facility that commenced construction, reconstruction, or modification on or before April 28, 2008, must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emission standards using the methods identified in §60.257.
<b>§60.255(b)</b>	An owner or operator of each affected facility that commenced construction, reconstruction, or modification after April 28, 2008, must conduct performance tests according to the requirements of §60.8 and the methods identified in §60.257 to demonstrate compliance with the applicable emissions standards in this subpart as specified in paragraphs (b)(1) and (2) of this section.
<b>§60.255(b)(1)</b>	<p>For each affected facility subject to a PM, SO<sub>2</sub>, or combined NO<sub>x</sub> and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.</p> <p>(i) If the results of the most recent performance test demonstrate that emissions from the affected facility are greater than 50 percent of the applicable emissions standard, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.</p> <p>(ii) If the results of the most recent performance test demonstrate that emissions from the affected facility are 50 percent or less of the applicable emissions standard, a new performance test must be conducted within 24 calendar months of the date that the previous performance test was required to be completed.</p> <p>(iii) An owner or operator of an affected facility that has not operated for the 60 calendar days prior to the due date of a performance test is not required to perform the subsequent performance test until 30 calendar days after the next operating day.</p>
<b>§60.255(b)(2)</b>	<p>For each affected facility subject to an opacity standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according to the requirements in paragraphs (b)(2)(i) through (iii) of this section, as applicable, except as provided for in paragraphs (e) and (f) of this section. Performance test and other compliance requirements for coal truck dump operations are specified in paragraph (h) of this section.</p> <p>(i) If any 6-minute average opacity reading in the most recent performance test exceeds half the applicable opacity limit, a new performance test must be conducted within 90 operating days of the date that the previous performance test was required to be completed.</p> <p>(ii) If all 6-minute average opacity readings in the most recent performance test are equal to or less than half the applicable opacity limit, a new performance test must be conducted within 12 calendar months of the date that the previous performance test was required to be completed.</p> <p>(iii) An owner or operator of an affected facility continuously monitoring scrubber parameters as specified in §60.256(b)(2) is exempt from the requirements in paragraphs (b)(2)(i) and (ii) if opacity performance tests are conducted concurrently with (or within a 60-minute period of) PM performance tests.</p>
<b>§60.255(c)</b>	If any affected coal processing and conveying equipment ( <i>e.g.</i> , breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction,

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	reconstruction, or modification after April 28, 2008, are enclosed in a building, and emissions from the building do not exceed any of the standards in §60.254 that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards.
<b>§60.255(d)</b>	<p>An owner or operator of an affected facility (other than a thermal dryer) that commenced construction, reconstruction, or modification after April 28, 2008, is subject to a PM emission standard and uses a control device with a design controlled potential PM emissions rate of 1.0 Mg (1.1 tons) per year or less is exempted from the requirements of paragraphs (b)(1)(i) and (ii) of this section provided that the owner or operator meets all of the conditions specified in paragraphs (d)(1) through (3) of this section. This exemption does not apply to thermal dryers.</p> <p>(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,</p> <p>(2) The control device manufacturer's recommended maintenance procedures are followed, and</p> <p>(3) All 6-minute average opacity readings from the most recent performance test are equal to or less than half the applicable opacity limit or the monitoring requirements in paragraphs (e) or (f) of this section are followed.</p>
<b>§60.255(e)</b>	<p>For an owner or operator of a group of up to five of the same type of affected facilities that commenced construction, reconstruction, or modification after April 28, 2008, that are subject to PM emissions standards and use identical control devices, the Administrator or delegated authority may allow the owner or operator to use a single PM performance test for one of the affected control devices to demonstrate that the group of affected facilities is in compliance with the applicable emissions standards provided that the owner or operator meets all of the conditions specified in paragraphs (e)(1) through (3) of this section.</p> <p>(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;</p> <p>(2) The manufacturer's recommended maintenance procedures are followed for each control device; and</p> <p>(3) A performance test is conducted on each affected facility at least once every 5 calendar years.</p>
<b>§60.255(f)</b>	As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, may elect to comply with the requirements in paragraph (f)(1) or (f)(2) of this section.
<b>§60.255(f)(1)</b>	<p>Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.</p> <p>(i) Conduct one daily 15-second observation each operating day for each affected facility (during normal operation) when the coal preparation and processing plant is in operation. Each observation must be recorded as either visible emissions observed or no visible emissions observed. Each observer determining the presence of visible emissions must meet the training requirements specified in §2.3 of Method 22 of appendix A-7 of this part. If visible emissions are observed during any 15-second observation, the owner or operator must adjust the operation of the affected facility and demonstrate within 24 hours that no visible emissions are observed from the affected facility. If visible emissions are observed, a Method 9, of appendix A-4 of this part, performance test must be conducted within 45 operating days.</p> <p>(ii) Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.</p> <p>(iii) Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.</p>

<p><b>§60.255(f)(2)</b></p>	<p>Prepare a written site-specific monitoring plan for a digital opacity compliance system for approval by the Administrator or delegated authority. The plan shall require observations of at least one digital image every 15 seconds for 10-minute periods (during normal operation) every operating day. An approvable monitoring plan must include a demonstration that the occurrences of visible emissions are not in excess of 5 percent of the observation period. For reference purposes in preparing the monitoring plan, <i>see</i> OAQPS “Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems.” This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.</p>
<p><b>§60.255(g)</b></p>	<p>As an alternative to meeting the requirements in paragraph (b)(2) of this section, an owner or operator of an affected facility that commenced construction, reconstruction, or modification after April 28, 2008, subject to a visible emissions standard under this subpart may install, operate, and maintain a continuous opacity monitoring system (COMS). Each COMS used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (g)(1) and (2) of this section.</p>
<p><b>§60.255(g)(1)</b></p>	<p>The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B.</p>
<p><b>§60.255(g)(2)</b></p>	<p>The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.</p> <p>(i) The owner or operator must automatically (intrinsic to the opacity monitor) check the zero and upscale (span) calibration drifts at least once daily. For particular COMS, the acceptable range of zero and upscale calibration materials is as defined in the applicable version of Performance Specification 1 in 40 CFR part 60, appendix B.</p> <p>(ii) The owner or operator must adjust the zero and span whenever the 24-hour zero drift or 24-hour span drift exceeds 4 percent opacity. The COMS must allow for the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified. The optical surfaces exposed to the effluent gases must be cleaned prior to performing the zero and span drift adjustments, except for systems using automatic zero adjustments. For systems using automatic zero adjustments, the optical surfaces must be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.</p> <p>(iii) The owner or operator must apply a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. All procedures applied must provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photodetector assembly.</p> <p>(iv) Except during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments, the COMS must be in continuous operation and must complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.</p> <p>(v) The owner or operator must reduce all data from the COMS to 6-minute averages. Six-minute opacity averages must be calculated from 36 or more data points equally spaced over each 6-minute period. Data recorded during periods of system breakdowns, repairs, calibration checks, and zero and span adjustments must not be included in the data averages. An arithmetic or integrated average of all data may be used.</p>
<p><b>§60.255(h)</b></p>	<p>The owner or operator of each affected coal truck dump operation that commenced construction, reconstruction, or modification after April 28, 2008, must meet the requirements specified in paragraphs (h)(1) through (3) of this section.</p>



<p><b>§60.255(h)(1)</b></p>	<p>Conduct an initial performance test using Method 9 of appendix A-4 of this part according to the requirements in paragraphs (h)(1)(i) and(ii).</p> <p>(i) Opacity readings shall be taken during the duration of three separate truck dump events. Each truck dump event commences when the truck bed begins to elevate and concludes when the truck bed returns to a horizontal position.</p> <p>(ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings made during the duration of three separate truck dump events.</p>
<p><b>§60.255(h)(2)</b></p>	<p>Conduct monthly visual observations of all process and control equipment. If any deficiencies are observed, the necessary maintenance must be performed as expeditiously as possible.</p>
<p><b>§60.255(h)(3)</b></p>	<p>Conduct a performance test using Method 9 of appendix A-4 of this part at least once every 5 calendar years for each affected facility.</p>

**Continuous Monitoring Requirements**

<p><b>§60.256(a)</b></p>	<p>The owner or operator of each affected facility constructed, reconstructed, or modified on or before April 28, 2008, must meet the monitoring requirements specified in paragraphs (a)(1) and (2) of this section, as applicable to the affected facility.</p>
<p><b>§60.256(a)(1)</b></p>	<p>The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:</p> <p>(i) 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 monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 1.7</math> °C (<math>\pm 3</math> °F).</p> <p>(ii) For affected facilities that use wet scrubber emission control equipment:</p> <p>(A) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 1</math> inch water gauge.</p> <p>(B) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 5</math> percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator shall have discretion to grant requests for approval of alternative monitoring locations.</p>
<p><b>§60.256(a)(2)</b></p>	<p>All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).</p>
<p><b>§60.256(b)</b></p>	<p>The owner or operator of each affected facility constructed, reconstructed, or modified after April 28, 2008, that has one or more mechanical vents must install, calibrate, maintain, and continuously operate the monitoring devices specified in paragraphs (b)(1) through (3) of this section, as applicable to the mechanical vent and any control device installed on the vent.</p>
<p><b>§60.256(b)(1)</b></p>	<p>For mechanical vents with fabric filters (baghouses) with design controlled potential PM emissions rates of 25 Mg (28 tons) per year or more, a bag leak detection system according to the requirements in paragraph (c) of this section.</p>

<p><b>§60.256(b)(2)</b></p>	<p>For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.</p> <p>(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 1</math> inch water gauge.</p> <p>(ii) A monitoring device for the continuous measurement of the water supply flow rate to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 5</math> percent of design water supply flow rate.</p> <p>(iii) A monitoring device for the continuous measurement of the pH of the wet scrubber liquid. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 5</math> percent of design pH.</p> <p>(iv) An average value for each monitoring parameter must be determined during each performance test. Each monitoring parameter must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.</p>
<p><b>§60.256(b)(3)</b></p>	<p>For mechanical vents with control equipment other than wet scrubbers, a monitoring device for the continuous measurement of the reagent injection flow rate to the control equipment, as applicable. The monitoring device is to be certified by the manufacturer to be accurate within <math>\pm 5</math> percent of design injection flow rate. An average reagent injection flow rate value must be determined during each performance test. The reagent injection flow rate must then be maintained within 10 percent of the value established during the most recent performance test on an operating day average basis.</p>
<p><b>§60.256(c)</b></p>	<p>Each bag leak detection system used to comply with provisions of this subpart must be installed, calibrated, maintained, and continuously operated according to the requirements in paragraphs (c)(1) through (3) of this section.</p>
<p><b>§60.256(c)(1)</b></p>	<p>The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.</p> <p>(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (mg/dscm) (0.00044 grains per actual cubic foot (gr/acf)) or less.</p> <p>(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).</p> <p>(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (c)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.</p> <p>(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.</p> <p>(v) Following initial adjustment, the owner or operator must not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (c)(2)(vi) of this section.</p> <p>(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in</p>

	<p>the site-specific monitoring plan required by paragraph (c)(2) of this section.</p> <p>(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.</p> <p>(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.</p>
<p><b>§60.256(c)(2)</b></p>	<p>The owner or operator must develop and submit to the Administrator or delegated authority for approval a site-specific monitoring plan for each bag leak detection system. This plan must be submitted to the Administrator or delegated authority 30 days prior to startup of the affected facility. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (c)(2)(i) through (vi) of this section.</p> <p>(i) Installation of the bag leak detection system;</p> <p>(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;</p> <p>(iii) Operation of the bag leak detection system, including quality assurance procedures;</p> <p>(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;</p> <p>(v) How the bag leak detection system output will be recorded and stored; and</p> <p>(vi) Corrective action procedures as specified in paragraph (c)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow the owner and operator more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.</p>
<p><b>§60.256(c)(3)</b></p>	<p>For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (c)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:</p> <p>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</p> <p>(ii) Sealing off defective bags or filter media;</p> <p>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</p> <p>(iv) Sealing off a defective fabric filter compartment;</p> <p>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</p> <p>(vi) Shutting down the process producing the PM emissions.</p>

**Test Methods and Procedures**

<p><b>§60.257(a)</b></p>	<p>The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.</p>
<p><b>§60.257(a)(1)</b></p>	<p>Method 9 of appendix A-4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).</p> <p>(i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).</p> <p>(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part 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.</p>
<p><b>§60.257(a)(2)</b></p>	<p>To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.</p> <p>(i) 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.</p> <p>(ii) 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.</p> <p>(iii) 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.</p>
<p><b>§60.257(a)(3)</b></p>	<p>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 (a)(3)(i) through (iii) of this section are met.</p> <p>(i) No more than three emissions points may be read concurrently.</p> <p>(ii) 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.</p> <p>(iii) 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.</p>
<p><b>§60.257(b)</b></p>	<p>The owner or operator must conduct all performance tests required by §60.8 to demonstrate compliance with the applicable emissions standards specified in §60.252 according to the requirements in §60.8 using the applicable test methods and procedures in paragraphs (b)(1) through (8) of this section.</p> <p>(1) Method 1 or 1A of appendix A-4 of this part 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.</p> <p>(2) Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A-4 of this part shall be used to determine the volumetric flow rate of the stack gas.</p> <p>(3) Method 3, 3A, or 3B of appendix A-4 of this part 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</p>

	<p>Analyses (incorporated by reference—<i>see</i> §60.17) as an alternative to Method 3B of appendix A-2 of this part.</p> <p>(4) Method 4 of appendix A-4 of this part shall be used to determine the moisture content of the stack gas.</p> <p>(5) Method 5, 5B or 5D of appendix A-4 of this part or Method 17 of appendix A-7 of this part shall be used to determine the PM concentration as follows:</p> <p>(i) 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.</p> <p>(ii) Method 5 of appendix A of this part shall be used only to test emissions from affected facilities without wet flue gas desulfurization (FGD) systems.</p> <p>(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.</p> <p>(iv) Method 5D of appendix A-4 of this part shall be used for positive pressure fabric filters and other similar applications (<i>e.g.</i>, stub stacks and roof vents).</p> <p>(v) Method 17 of appendix A-6 of this part may be used at facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of sections 8.1 and 11.1 of Method 5B of appendix A-3 of this part may be used in Method 17 of appendix A-6 of this part only if it is used after a wet FGD system. Do not use Method 17 of appendix A-6 of this part after wet FGD systems if the effluent is saturated or laden with water droplets.</p> <p>(6) Method 6, 6A, or 6C of appendix A-4 of this part shall be used to determine the SO<sub>2</sub> concentration. A minimum of three valid test runs are needed to comprise an SO<sub>2</sub> performance test.</p> <p>(7) Method 7 or 7E of appendix A-4 of this part shall be used to determine the NO<sub>x</sub> concentration. A minimum of three valid test runs are needed to comprise an NO<sub>x</sub> performance test.</p> <p>(8) Method 10 of appendix A-4 of this part shall be used to determine the CO concentration. A minimum of three valid test runs are needed to comprise a CO performance test. CO performance tests are conducted concurrently (or within a 60-minute period) with NO<sub>x</sub> performance tests.</p>
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**Reporting and Recordkeeping**

<p><b>§60.258(a)</b></p>	<p>The owner or operator of a coal preparation and processing plant that commenced construction, reconstruction, or modification after April 28, 2008, shall maintain in a logbook (written or electronic) on-site and make it available upon request. The logbook shall record the following:</p> <p>(1) The manufacturer's recommended maintenance procedures and the date and time of any maintenance and inspection activities and the results of those activities. Any variance from manufacturer recommendation, if any, shall be noted.</p> <p>(2) The date and time of periodic coal preparation and processing plant visual observations, noting those sources with visible emissions along with corrective actions taken to reduce visible emissions. Results from the actions shall be noted.</p> <p>(3) The amount and type of coal processed each calendar month.</p>
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	<p>(4) The amount of chemical stabilizer or water purchased for use in coal preparation and processing plant.</p> <p>(5) Monthly certification that the dust suppressant systems were operational when any coal was processed and that manufacturer's recommendations were followed for all control systems. Any variance from the manufacturer's recommendations, if any, shall be noted.</p> <p>(6) Monthly certification that the fugitive coal dust emissions control plan was implemented as described. Any variance from the plan, if any, shall be noted. A copy of the applicable fugitive coal dust emissions control plan and any letters from the Administrator providing approval of any alternative control measures shall be maintained with the logbook. Any actions, e.g., objections, to the plan and any actions relative to the alternative control measures, e.g., approvals, shall be noted in the logbook as well.</p> <p>(7) For each bag leak detection system, the owner or operator must keep the records specified in paragraphs (a)(7)(i) through (iii) of this section.</p> <p>(i) Records of the bag leak detection system output;</p> <p>(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection settings; and</p> <p>(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.</p> <p>(8) A copy of any applicable monitoring plan for a digital opacity compliance system and monthly certification that the plan was implemented as described. Any variance from plan, if any, shall be noted.</p> <p>(9) During a performance test of a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the scrubber pressure loss, water supply flow rate, and pH of the wet scrubber liquid.</p> <p>(10) During a performance test of control equipment other than a wet scrubber, and each operating day thereafter, the owner or operator shall record the measurements of the reagent injection flow rate, as applicable.</p>
<p><b>§60.258(b)</b></p>	<p>For the purpose of reports required under section 60.7(c), any owner operator subject to the provisions of this subpart also shall report semiannually periods of excess emissions as follow:</p> <p>(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.</p> <p>(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.</p> <p>(3) All 6-minute average opacities that exceed the applicable standard.</p>
<p><b>§60.258(c)</b></p>	<p>The owner or operator of an affected facility shall submit the results of initial performance tests to the Administrator or delegated authority, consistent with the provisions of section 60.8. The owner or operator who elects to comply with the reduced performance testing provisions of sections 60.255(c) or (d) shall include in the performance test report identification of each affected facility.</p>

<b>§60.258(d)</b>	After July 1, 2011, within 60 days after the date of completing each performance evaluation conducted to demonstrate compliance with this subpart, 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 <a href="http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main">http://cfpub.epa.gov/oarweb/index.cfm?action=fire.main</a> . For performance tests that cannot be entered into WebFIRE ( <i>i.e.</i> , Method 9 of appendix A-4 of this part 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.
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**FEDERAL REGULATIONS  
40 CFR PART 60 SUBPART OOO**

**Standards of Performance for Nonmetallic Mineral Processing Plants**

Subject Emission Units Permit Number	All equipment listed in the following permits: 1147033
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**Applicability and Designation of Affected Facility**

<b>§60.670</b>	<p>(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.</p> <p>(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).</p> <p>(b) An affected facility that is subject to the provisions of subparts F or I of this part or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.</p> <p>(c) Facilities at the following plants are not subject to the provisions of this subpart:</p> <p>(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 23 megagrams per hour (25 tons per hour) or less;</p> <p>(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in §60.671, of 136 megagrams per hour (150 tons per hour) or less; and</p> <p>(3) Common clay plants and pumice plants with capacities, as defined in §60.671, of 9 megagrams per hour (10 tons per hour) or less.</p> <p>(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §§60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.</p> <p>(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).</p> <p>(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§60.672, 60.674 and 60.675.</p> <p>(e) An affected facility under paragraph (a) of this section that commences construction, modification, or reconstruction after August 31, 1983, is subject to the requirements of this part.</p>
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	(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions.
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**Standard for Particulate Matter (PM)**

<b>§60.672</b>	<p>(a) Affected facilities must meet the stack emission limits and compliance requirements in Table 2 of this subpart 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 as required under §60.8. The requirements in Table 2 of this subpart apply for affected facilities with capture systems used to capture and transport particulate matter to a control device.</p> <p>(b) Affected facilities must meet the fugitive emission limits and compliance requirements in Table 3 of this subpart 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 as required under §60.11. The requirements in Table 3 of this subpart apply for fugitive emissions from affected facilities without capture systems and for fugitive emissions escaping capture systems.</p> <p>(c) [Reserved]</p> <p>(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.</p> <p>(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a) and (b) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:</p> <p>(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and</p> <p>(2) Vents (as defined in §60.671) in the building must meet the applicable stack emission limits and compliance requirements in Table 2 of this subpart.</p> <p>(f) Any baghouse that controls emissions from only an individual, enclosed storage bin is exempt from the applicable stack PM concentration limit (and associated performance testing) in Table 2 of this subpart but must meet the applicable stack opacity limit and compliance requirements in Table 2 of this subpart. This exemption from the stack PM concentration limit does not apply for multiple storage bins with combined stack emissions.</p>
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**Reconstruction**

<b>§60.673</b>	<p>(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital cost that would be required to construct a comparable new facility” under §60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.</p> <p>(b) Under §60.15, the “fixed capital cost of the new components” includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.</p>
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**Monitoring of Operations**

<p><b>§60.674(a)</b></p>	<p>The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:</p> <p>(1) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within <math>\pm 250</math> pascals <math>\pm 1</math> inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.</p> <p>(2) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within <math>\pm 5</math> percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.</p>
<p><b>§60.674(b)</b></p>	<p>The owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses wet suppression to control emissions from the affected facility must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expeditiously as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under §60.676(b).</p> <p>(1) If an affected facility relies on water carryover from upstream water sprays to control fugitive emissions, then that affected facility is exempt from the 5-year repeat testing requirement specified in Table 3 of this subpart provided that the affected facility meets the criteria in paragraphs (b)(1)(i) and (ii) of this section:</p> <p>(i) The owner or operator of the affected facility conducts periodic inspections of the upstream water spray(s) that are responsible for controlling fugitive emissions from the affected facility. These inspections are conducted according to paragraph (b) of this section and §60.676(b), and</p> <p>(ii) The owner or operator of the affected facility designates which upstream water spray(s) will be periodically inspected at the time of the initial performance test required under §60.11 of this part and §60.675 of this subpart.</p> <p>(2) If an affected facility that routinely uses wet suppression water sprays ceases operation of the water sprays or is using a control mechanism to reduce fugitive emissions other than water sprays during the monthly inspection (for example, water from recent rainfall), the logbook entry required under §60.676(b) must specify the control mechanism being used instead of the water sprays.</p>
<p><b>§60.674(c)</b></p>	<p>Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions must conduct quarterly 30-minute visible emissions inspections using EPA Method 22 (40 CFR part 60, Appendix A-7). The Method 22 (40 CFR part 60, Appendix A-7) test shall be conducted while the baghouse is operating. The test is successful if no visible emissions are observed. If any visible emissions are observed, the owner or operator of the affected facility must initiate corrective action within 24 hours to return the baghouse to normal operation. The owner or operator must record each Method 22 (40 CFR part 60, Appendix A-7) test, including the date and any corrective actions taken, in the logbook required under §60.676(b). The owner or operator of the affected facility may establish a different baghouse-specific success level for the visible emissions test (other than no visible emissions) by conducting a PM performance test according to §60.675(b) simultaneously with a Method 22 (40 CFR part 60, Appendix A-7) to determine what constitutes normal visible emissions from that affected facility's baghouse when it is in compliance with the applicable PM concentration limit in Table 2 of this subpart. The revised visible emissions success level must be incorporated into the permit for the affected facility.</p>

<p><b>§60.674(d)</b></p>	<p>As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility for which construction, modification, or reconstruction commenced on or after April 22, 2008, that uses a baghouse to control emissions may use a bag leak detection system. The owner or operator must install, operate, and maintain the bag leak detection system according to paragraphs (d)(1) through (3) of this section.</p>
<p><b>§60.674(d)(1)</b></p>	<p>Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.</p> <p>(i) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 1 milligram per dry standard cubic meter (0.00044 grains per actual cubic foot) or less.</p> <p>(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (<i>e.g.</i>, using a strip chart recorder or a data logger).</p> <p>(iii) The bag leak detection system must be equipped with an alarm system that will sound when the system detects an increase in relative particulate loading over the alarm set point established according to paragraph (d)(1)(iv) of this section, and the alarm must be located such that it can be heard by the appropriate plant personnel.</p> <p>(iv) In the initial adjustment of the bag leak detection system, the owner or operator must establish, at a minimum, the baseline output by adjusting the sensitivity (range) and the averaging period of the device, the alarm set points, and the alarm delay time.</p> <p>(v) Following initial adjustment, the owner or operator shall not adjust the averaging period, alarm set point, or alarm delay time without approval from the Administrator or delegated authority except as provided in paragraph (d)(1)(vi) of this section.</p> <p>(vi) Once per quarter, the owner or operator may adjust the sensitivity of the bag leak detection system to account for seasonal effects, including temperature and humidity, according to the procedures identified in the site-specific monitoring plan required by paragraph (d)(2) of this section.</p> <p>(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.</p> <p>(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.</p>
<p><b>§60.674(d)(2)</b></p>	<p>The owner or operator of the affected facility must develop and submit to the Administrator or delegated authority for approval of a site-specific monitoring plan for each bag leak detection system. The owner or operator must operate and maintain the bag leak detection system according to the site-specific monitoring plan at all times. Each monitoring plan must describe the items in paragraphs (d)(2)(i) through (vi) of this section.</p> <p>(i) Installation of the bag leak detection system;</p> <p>(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;</p> <p>(iii) Operation of the bag leak detection system, including quality assurance procedures;</p> <p>(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;</p>

	<p>(v) How the bag leak detection system output will be recorded and stored; and</p> <p>(vi) Corrective action procedures as specified in paragraph (d)(3) of this section. In approving the site-specific monitoring plan, the Administrator or delegated authority may allow owners and operators more than 3 hours to alleviate a specific condition that causes an alarm if the owner or operator identifies in the monitoring plan this specific condition as one that could lead to an alarm, adequately explains why it is not feasible to alleviate this condition within 3 hours of the time the alarm occurs, and demonstrates that the requested time will ensure alleviation of this condition as expeditiously as practicable.</p>
<b>§60.674(d)(3)</b>	<p>For each bag leak detection system, the owner or operator must initiate procedures to determine the cause of every alarm within 1 hour of the alarm. Except as provided in paragraph (d)(2)(vi) of this section, the owner or operator must alleviate the cause of the alarm within 3 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:</p> <p>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</p> <p>(ii) Sealing off defective bags or filter media;</p> <p>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</p> <p>(iv) Sealing off a defective fabric filter compartment;</p> <p>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</p> <p>(vi) Shutting down the process producing the PM emissions.</p>
<b>§60.674(e)</b>	<p>As an alternative to the periodic Method 22 (40 CFR part 60, Appendix A-7) visible emissions inspections specified in paragraph (c) of this section, the owner or operator of any affected facility that is subject to the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) may follow the continuous compliance requirements in row 1 items (i) through (iii) of table 6 to subpart AAAAA of 40 CFR part 63.</p>

**Test Methods and Procedures**

<b>§60.675(a)</b>	<p>In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendices A-1 through A-7 of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.</p>
<b>§60.675(b)</b>	<p>The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:</p> <p>(1) Except as specified in paragraphs (e)(3) and (4) of this section, Method 5 of Appendix A-3 of this part or Method 17 of Appendix A-6 of this part shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5 (40 CFR part 60, Appendix A-3), if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.</p> <p>(2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity.</p>

<p><b>§60.675(c)</b></p>	<p>(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A-4 of this part and the procedures in §60.11, with the following additions:</p> <p>(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).</p> <p>(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (<i>e.g.</i>, road dust). The required observer position relative to the sun (Method 9 of Appendix A-4 of this part, Section 2.1) must be followed.</p> <p>(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.</p> <p>(2)(i) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9 (40 CFR part 60, Appendix A-4), the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations shall be 1 hour (ten 6-minute averages).</p> <p>(ii) The duration of the Method 9 (40 CFR part 60, Appendix A-4) observations may be reduced to the duration the affected facility operates (but not less than 30 minutes) for baghouses that control storage bins or enclosed truck or railcar loading stations that operate for less than 1 hour at a time.</p> <p>(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A-4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.</p>
<p><b>§60.675(d)</b></p>	<p>To demonstrate compliance with the fugitive emission limits for buildings specified in §60.672(e)(1), the owner or operator must complete the testing specified in paragraph (d)(1) and (2) of this section. Performance tests must be conducted while all affected facilities inside the building are operating.</p> <p>(1) If the building encloses any affected facility that commences construction, modification, or reconstruction on or after April 22, 2008, the owner or operator of the affected facility must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11.</p> <p>(2) If the building encloses only affected facilities that commenced construction, modification, or reconstruction before April 22, 2008, and the owner or operator has previously conducted an initial Method 22 (40 CFR part 60, Appendix A-7) performance test showing zero visible emissions, then the owner or operator has demonstrated compliance with the opacity limit in §60.672(e)(1). If the owner or operator has not conducted an initial performance test for the building before April 22, 2008, then the owner or operator must conduct an initial Method 9 (40 CFR part 60, Appendix A-4) performance test according to this section and §60.11 to show compliance with the opacity limit in §60.672(e)(1).</p>
<p><b>§60.675(e)(1)</b></p>	<p>The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:</p> <p>(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:</p> <p>(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.</p> <p>(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.</p>

<p><b>§60.675(e)(2)</b></p>	<p>A single visible emission 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 are met:</p> <p>(i) No more than three emission points may be read concurrently.</p> <p>(ii) All three emission 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.</p> <p>(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.</p>
<p><b>§60.675(e)(3)</b></p>	<p>Method 5I of Appendix A-3 of this part may be used to determine the PM concentration as an alternative to the methods specified in paragraph (b)(1) of this section. Method 5I (40 CFR part 60, Appendix A-3) may be useful for affected facilities that operate for less than 1 hour at a time such as (but not limited to) storage bins or enclosed truck or railcar loading stations.</p>
<p><b>§60.675(e)(4)</b></p>	<p>In some cases, velocities of exhaust gases from building vents may be too low to measure accurately with the type S pitot tube specified in EPA Method 2 of Appendix A-1 of this part [<i>i.e.</i>, velocity head &lt;1.3 mm H<sub>2</sub>O (0.05 in. H<sub>2</sub>O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (<i>e.g.</i>, from vendor-supplied fan curves) to the building vent. The owner or operator may calculate the average gas velocity at the building vent measurement site using Equation 1 of this section and use this average velocity in determining and maintaining isokinetic sampling rates.</p> $v_e = \frac{Q_f}{A_e} \quad (\text{Eq 1})$ <p>Where:</p> <p><math>V_e</math> = average building vent velocity (feet per minute);</p> <p><math>Q_f</math> = average fan flow rate (cubic feet per minute); and</p> <p><math>A_e</math> = area of building vent and measurement location (square feet).</p>
<p><b>§60.675(f)</b></p>	<p>To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a)(1) and (2) during each particulate matter run and shall determine the averages.</p>
<p><b>§60.675(g)</b></p>	<p>For performance tests involving only Method 9 (40 CFR part 60 Appendix A-4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.</p>
<p><b>§60.675(h)</b></p>	<p>[Reserved]</p>
<p><b>§60.675(i)</b></p>	<p>If the initial performance test date for an affected facility falls during a seasonal shut down (as defined in §60.671 of this subpart) of the affected facility, then with approval from the permitting authority, the owner or operator may postpone the initial performance test until no later than 60 calendar days after resuming operation of the affected facility.</p>

**Reporting and Recordkeeping**

<p><b>§60.676(a)</b></p>	<p>Each owner or operator seeking to comply with §60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.</p> <p>(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:</p> <p>(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and</p> <p>(ii) The rated capacity in tons per hour of the replacement equipment.</p> <p>(2) For a screening operation:</p> <p>(i) The total surface area of the top screen of the existing screening operation being replaced and</p> <p>(ii) The total surface area of the top screen of the replacement screening operation.</p> <p>(3) For a conveyor belt:</p> <p>(i) The width of the existing belt being replaced and</p> <p>(ii) The width of the replacement conveyor belt.</p> <p>(4) For a storage bin:</p> <p>(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and</p> <p>(ii) The rated capacity in megagrams or tons of replacement storage bins.</p>
<p><b>§60.676(b)(1)</b></p>	<p>(1) Owners or operators of affected facilities (as defined in §§60.670 and 60.671) for which construction, modification, or reconstruction commenced on or after April 22, 2008, must record each periodic inspection required under §60.674(b) or (c), including dates and any corrective actions taken, in a logbook (in written or electronic format). The owner or operator must keep the logbook onsite and make hard or electronic copies (whichever is requested) of the logbook available to the Administrator upon request.</p>
<p><b>§60.676(b)(2)</b></p>	<p>For each bag leak detection system installed and operated according to §60.674(d), the owner or operator must keep the records specified in paragraphs (b)(2)(i) through (iii) of this section.</p> <p>(i) Records of the bag leak detection system output;</p> <p>(ii) Records of bag leak detection system adjustments, including the date and time of the adjustment, the initial bag leak detection system settings, and the final bag leak detection system settings; and</p> <p>(iii) The date and time of all bag leak detection system alarms, the time that procedures to determine the cause of the alarm were initiated, the cause of the alarm, an explanation of the actions taken, the date and time the cause of the alarm was alleviated, and whether the cause of the alarm was alleviated within 3 hours of the alarm.</p>
<p><b>§60.676(b)(3)</b></p>	<p>The owner or operator of each affected facility demonstrating compliance according to §60.674(e) by following the requirements for processed stone handling operations in the Lime Manufacturing NESHAP (40 CFR part 63, subpart AAAAA) must maintain records of visible emissions observations required by §63.7132(a)(3) and (b) of 40 CFR part 63, subpart AAAAA.</p>

<b>§60.676(c)</b>	During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.
<b>§60.676(d)</b>	After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss and liquid flow rate decrease by more than 30 percent from the average determined during the most recent performance test.
<b>§60.676(e)</b>	The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters.
<b>§60.676(f)</b>	The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A-4) to demonstrate compliance with §60.672(b), (e) and (f).
<b>§60.676(g)</b>	The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.
<b>§60.676(h)</b>	The subpart A requirement under §60.7(a)(1) for notification of the date construction or reconstruction commenced is waived for affected facilities under this subpart.
<b>§60.676(i)</b>	<p>A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.</p> <p>(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.</p> <p>(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.</p>
<b>§60.676(j)</b>	The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected facilities within the State will be relieved of the obligation to comply with the reporting requirements of this section, provided that they comply with requirements established by the State.
<b>§60.676(k)</b>	Notifications and reports required under this subpart and under subpart A of this part to demonstrate compliance with this subpart need only to be sent to the EPA Region or the State which has been delegated authority according to §60.4(b).



**Table 1 to Subpart OOO of Part 60—Exceptions to Applicability of Subpart A to Subpart OOO**

Subpart A reference	Applies to subpart OOO	Explanation
60.4, Address	Yes	Except in §60.4(a) and (b) submittals need not be submitted to both the EPA Region and delegated State authority (§60.676(k)).
60.7, Notification and recordkeeping	Yes	Except in (a)(1) notification of the date construction or reconstruction commenced (§60.676(h)).
		Also, except in (a)(6) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.8, Performance tests	Yes	Except in (d) performance tests involving only Method 9 (40 CFR part 60, Appendix A-4) require a 7-day advance notification instead of 30 days (§60.675(g)).
60.11, Compliance with standards and maintenance requirements	Yes	Except in (b) under certain conditions (§§60.675(c)), Method 9 (40 CFR part 60, Appendix A-4) observation is reduced from 3 hours to 30 minutes for fugitive emissions.
60.18, General control device	No	Flares will not be used to comply with the emission limits.

**Table 2 to Subpart OOO of Part 60—Stack Emission Limits for Affected Facilities with Capture Systems**

For * * *	The owner or operator must meet a PM limit of * * *	And the owner or operator must meet an opacity limit of * * *	The owner or operator must demonstrate compliance with these limits by conducting * * *
Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008	0.05 g/dscm (0.022 gr/dscf) <sup>a</sup>	7 percent for dry control devices <sup>b</sup>	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e).
Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008	0.032 g/dscm (0.014 gr/dscf) <sup>a</sup>	Not applicable (except for individual enclosed storage bins) 7 percent for dry control devices on individual enclosed storage bins	An initial performance test according to §60.8 of this part and §60.675 of this subpart; and Monitoring of wet scrubber parameters according to §60.674(a) and §60.676(c), (d), and (e); and
			Monitoring of baghouses according to §60.674(c), (d), or (e) and §60.676(b).

<sup>a</sup>Exceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

<sup>b</sup>The stack opacity limit and associated opacity testing requirements do not apply for affected facilities using wet scrubbers.

**Table 3 to Subpart OOO of Part 60—Fugitive Emission Limits**

<p><b>For * * *</b></p>	<p><b>The owner or operator must meet the following fugitive emissions limit for grinding mills, screening operations, bucket elevators, transfer points on belt conveyors, bagging operations, storage bins, enclosed truck or railcar loading stations or from any other affected facility (as defined in §§60.670 and 60.671) * * *</b></p>	<p><b>The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * *</b></p>	<p><b>The owner or operator must demonstrate compliance with these limits by conducting * * *</b></p>
<p>Affected facilities (as defined in §§60.670 and 60.671) that commenced construction, modification, or reconstruction after August 31, 1983 but before April 22, 2008</p>	<p>10 percent opacity</p>	<p>15 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart.</p>
<p>Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008</p>	<p>7 percent opacity</p>	<p>12 percent opacity</p>	<p>An initial performance test according to §60.11 of this part and §60.675 of this subpart; and Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and</p>
			<p>A repeat performance test according to §60.11 of this part and §60.675 of this subpart within 5 years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in §60.674(b) and §60.676(b) are exempt from this 5-year repeat testing requirement.</p>

**FEDERAL REGULATIONS  
40 CFR 61 SUBPART M  
National Emission Standard for Asbestos**

**Applicable provisions of 40 CFR 61 Subpart M shall apply.**

**[55 FR 48414, Nov. 20, 1990]**

**Applicability**

<b>§61.140</b>	The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155.
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**Standard for Roadways**

<b>§61.143</b>	<p>No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.</p> <p>(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or</p> <p>(b) It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder. The encapsulated road surface must be maintained at a minimum frequency of once per year to prevent dust emissions; or</p> <p>(c) It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.</p>
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**Standard for Demolition and Renovation**

<b>§61.145(a)</b>	(a) To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:
<b>§61.145(a)(1)</b>	<p>(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.</p>

<p><b>§61.145(a)(2)</b></p>	<p>(2) In a facility being demolished, only the notification requirements of paragraphs (b)(1), (2), (3)(i) and (iv), and (4)(i) through (vii) and (4)(ix) and (xvi) of this section apply, if the combined amount of RACM is</p> <p>(i) Less than 80 linear meters (260 linear feet) on pipes and less than 15 square meters (160 square feet) on other facility components, and</p> <p>(ii) Less than one cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously or there is no asbestos.</p> <p>(3) If the facility is being demolished under an order of a State or local government agency, issued because the facility is structurally unsound and in danger of imminent collapse, only the requirements of paragraphs (b)(1), (b)(2), (b)(3)(iii), (b)(4) (except (b)(4)(viii)), (b)(5), and (c)(4) through (c)(9) of this section apply.</p> <p>(4) In a facility being renovated, including any individual nonscheduled renovation operation, all the requirements of paragraphs (b) and (c) of this section apply if the combined amount of RACM to be stripped, removed, dislodged, cut, drilled, or similarly disturbed is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.</p> <p>(iii) To determine whether paragraph (a)(4) of this section applies to planned renovation operations involving individual nonscheduled operations, predict the combined additive amount of RACM to be removed or stripped during a calendar year of January 1 through December 31.</p> <p>(iv) To determine whether paragraph (a)(4) of this section applies to emergency renovation operations, estimate the combined amount of RACM to be removed or stripped as a result of the sudden, unexpected event that necessitated the renovation.</p> <p>(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09.</p>
<p><b>§61.145(b)</b></p>	<p><b>Notification Requirements</b></p> <p>(b)Each owner or operator of a demolition or renovation activity to which this section applies shall:</p> <p>(1) Provide the Administrator with written notice of intention to demolish or renovate. Delivery of the notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.</p> <p>(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.</p> <p>(3) Postmark or deliver the notice as follows:</p> <p>(i) At least 10 working days before asbestos stripping or removal work or any other activity begins (such as site preparation that would break up, dislodge or similarly disturb asbestos material), if the operation is described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section. If the operation is as described in paragraph (a)(2) of this section, notification is required 10 working days before demolition begins.</p>

**§61.145(b)**

(ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.

(iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.

(iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:

(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,

(1) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and

(2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,

(1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.

(2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.

(C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.

(4) Include the following in the notice:

(i) An indication of whether the notice is the original or a revised notification.

(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.

(iii) Type of operation: demolition or renovation.

(iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.

(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

<p><b>§61.145(b)</b></p>	<p>(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.</p> <p>(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.</p> <p>(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.</p> <p>(ix) Scheduled starting and completion dates of demolition or renovation.</p> <p>(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.</p> <p>(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.</p> <p>(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.</p> <p>(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.</p> <p>(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.</p> <p>(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.</p> <p>(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.</p> <p>(xvii) Name, address, and telephone number of the waste transporter.</p> <p>(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.</p>
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<p><b>§61.145(c)</b></p>	<p><b>Procedures for Asbestos Emission Control.</b></p> <p>(c) Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:</p> <p>(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:</p> <ul style="list-style-type: none"><li>(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.</li><li>(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or</li><li>(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.</li><li>(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.</li></ul> <p>(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:</p> <ul style="list-style-type: none"><li>(i) Adequately wet all RACM exposed during cutting or disjoining operations; and</li><li>(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.</li></ul> <p>(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.</p> <ul style="list-style-type: none"><li>(i) In renovation operations, wetting is not required if:<ul style="list-style-type: none"><li>(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and</li><li>(B) The owner or operator uses one of the following emission control methods:<ul style="list-style-type: none"><li>(1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.</li><li>(2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.</li><li>(3) Leak-tight wrapping to contain all RACM prior to dismantlement.</li></ul></li></ul></li></ul>
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**§61.145(c)**

(ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.

(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.

(4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:

(i) Adequately wet the RACM during stripping; or

(ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.

(5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:

(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.

(ii) The component is encased in a leak-tight wrapping.

(iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.

(6) For all RACM, including material that has been removed or stripped:

(i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and

(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.

(iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.

(iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.

(7) When the temperature at the point of wetting is below 0 °C (32 °F):

(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.

(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.



<p><b>§61.145(c)</b></p>	<p>(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.</p> <p>(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.</p> <p>(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.</p> <p>(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.</p>
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**Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations**

<p><b>§61.150</b></p>	<p>Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:</p> <p>(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.</p> <p>(1) Adequately wet asbestos-containing waste material as follows:</p> <p>(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and</p> <p>(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and</p> <p>(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and</p>
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**§61.150**

(iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.

(v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.

(2) Process asbestos-containing waste material into nonfriable forms as follows:

(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;

(ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.

(3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.

(4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).

(5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.

(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:

(1) A waste disposal site operated in accordance with the provisions of §61.154, or

(2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.

(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.

(c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).

(d) For all asbestos-containing waste material transported off the facility site:

(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:

(i) The name, address, and telephone number of the waste generator.

**§61.150**

(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.

(iii) The approximate quantity in cubic meters (cubic yards).

(iv) The name and telephone number of the disposal site operator.

(v) The name and physical site location of the disposal site.

(vi) The date transported.

(vii) The name, address, and telephone number of the transporter(s).

(viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.

(2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.

(3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.

(4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:

(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and

(ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.

(5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.

(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

**Air Cleaning**

<p><b>§61.152</b></p>	<p>(a) The owner or operator who uses air cleaning, as specified in §§61.142(a), 61.144(b)(2), 61.145(c)(3)(i)(B)(I), 61.145(c)(4)(ii), 61.145(c)(11)(i), 61.146(b)(2), 61.147(b)(2), 61.149(b), 61.149(c)(1)(ii), 61.150(a)(1)(ii), 61.150(a)(2)(ii), and 61.155(e) shall:</p> <p>(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:</p> <p>(i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 m<sup>3</sup>/min/m<sup>2</sup> (30 ft<sup>3</sup>/min/ft<sup>2</sup>) for woven fabrics or 11<sup>3</sup>/min/m<sup>2</sup>(35 ft<sup>3</sup>/min/ft<sup>2</sup>) for felted fabrics, except that 12 m<sup>3</sup>/min/m<sup>2</sup> (40 ft<sup>3</sup>min/ft<sup>2</sup>) for woven and 14 m<sup>3</sup>/min/m<sup>2</sup> (45 ft<sup>3</sup>min/ft<sup>2</sup>) for felted fabrics is allowed for filtering air from asbestos ore dryers; and</p> <p>(ii) Ensuring that felted fabric weighs at least 475 grams per square meter (14 ounces per square yard) and is at least 1.6 millimeters (one-sixteenth inch) thick throughout; and</p> <p>(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.</p> <p>(2) Properly install, use, operate, and maintain all air-cleaning equipment authorized by this section. Bypass devices may be used only during upset or emergency conditions and then only for so long as it takes to shut down the operation generating the particulate asbestos material.</p> <p>(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.</p> <p>(b) There are the following exceptions to paragraph (a)(1):</p> <p>(1) After January 10, 1989, if the use of fabric creates a fire or explosion hazard, or the Administrator determines that a fabric filter is not feasible, the Administrator may authorize as a substitute the use of wet collectors designed to operate with a unit contacting energy of at least 9.95 kilopascals (40 inches water gage pressure).</p> <p>(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.</p> <p>(3) The Administrator may authorize the use of filtering equipment other than described in paragraphs (a)(1) and (b)(1) and (2) of this section if the owner or operator demonstrates to the Administrator's satisfaction that it is equivalent to the described equipment in filtering particulate asbestos material.</p>
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**Reporting**

<p><b>§61.153</b></p>	<p>(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.</p>
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<b>§61.153</b>	<p>(1) A description of the emission control equipment used for each process; and</p> <p>(i) If the fabric device uses a woven fabric, the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in <math>\text{g}/\text{m}^2</math>, the minimum thickness in inches, and the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math>.</p> <p>(2) If a fabric filter device is used to control emissions,</p> <p>(i) The airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> (<math>\text{ft}^3/\text{min}/\text{ft}^2</math>) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in <math>\text{g}/\text{m}^2</math> (<math>\text{oz}/\text{yd}^2</math>), the minimum thickness in millimeters (inches), and the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> (<math>\text{ft}^3/\text{min}/\text{ft}^2</math>).</p> <p>(3) If a HEPA filter is used to control emissions, the certified efficiency.</p> <p>(4) For sources subject to §§61.149 and 61.150:</p> <p>(i) A brief description of each process that generates asbestos-containing waste material; and</p> <p>(ii) The average volume of asbestos-containing waste material disposed of, measured in <math>\text{m}^3/\text{day}</math> (<math>\text{yd}^3/\text{day}</math>); and</p> <p>(iii) The emission control methods used in all stages of waste disposal; and</p> <p>(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.</p> <p>(5) For sources subject to §§61.151 and 61.154:</p> <p>(i) A brief description of the site; and</p> <p>(ii) The method or methods used to comply with the standard, or alternative procedures to be used.</p> <p>(b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.</p>
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**FEDERAL REGULATIONS  
NESHAPS SUBPART LLL**

**National Emission Standards for Hazardous Air Pollutants  
Portland Cement Manufacturing Industry**

Subject Emission Units Permit Number	All equipment listed in the following permits: 1147009, 1147010, 1147013, 1147014, 1147015, 1147016, 1147017, 1147018, 1147019, 1147020, 1147021, 1147022, and 1147024.
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**Sources with multiple emission limits or monitoring requirements. 40 CFR § 63.1356**

<b>§63.1356</b>	If an affected facility subject to this subpart has a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.
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**Compliance Dates. § 63.1351**

<b>§63.1351</b>	<p>(a) The compliance date for any affected existing source subject to any rule requirements that were in effect before December 20, 2006, is:</p> <p>(1) June 14, 2002, for sources that commenced construction before or on March 24, 1998.</p> <p>(c) The compliance date for existing sources for all the requirements that became effective on November 8, 2010 will be September 9, 2013.</p>
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**Affirmative defense for exceedance of emission limit during malfunction. § 63.1344**

<b>§63.1344</b>	<p>In response to an action to enforce the standards set forth in paragraph §63.1343(b) you may assert an affirmative defense to a claim for civil penalties for exceedances of such standards that are caused by malfunction, as defined at 40 CFR 63.2. Appropriate penalties may be assessed, however, if the respondent fails to meet its burden of proving all of the requirements in the affirmative defense. The affirmative defense shall not be available for claims for injunctive relief.</p> <p>(a) To establish the affirmative defense in any action to enforce such a limit, the owners or operators of facilities must timely meet the notification requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:</p> <p>(1) The excess emissions:</p> <p>(i) Were caused by a sudden, short, infrequent, and unavoidable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner, and</p> <p>(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and</p> <p>(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and</p> <p>(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and</p> <p>(2) Repairs were made as expeditiously as possible when the applicable emission limitations were being exceeded. Off-shift and overtime labor were used, to the extent practicable to make these repairs; and</p>
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	<p>(3) The frequency, amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions; and</p> <p>(4) If the excess emissions resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, severe personal injury, or severe property damage; and</p> <p>(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and</p> <p>(6) All emissions monitoring and control systems were kept in operation if at all possible; and</p> <p>(7) Your actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and</p> <p>(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and</p> <p>(9) The owner or operator has prepared a written root cause analysis to determine, correct, and eliminate the primary causes of the malfunction and the excess emissions resulting from the malfunction event at issue. The analysis shall also specify, using best monitoring methods and engineering judgment, the amount of excess emissions that were the result of the malfunction.</p> <p>(b) Notification. The owner or operator of the facility experiencing an exceedance of its emission limit(s) during a malfunction shall notify the Administrator by telephone or facsimile (FAX) transmission as soon as possible, but no later than two business days after the initial occurrence of the malfunction, if it wishes to avail itself of an affirmative defense to civil penalties for that malfunction. The owner or operator seeking to assert an affirmative defense shall also submit a written report to the Administrator within 30 days of the initial occurrence of the exceedance of the standard in §63.1343(b) to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in paragraph (a) of this section.</p>
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**Parts of plant included in subpart LLL. § 63.1340**

<b>§63.1340(a)</b>	The provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.
<b>§63.1340(b)</b>	<p>The affected sources subject to this subpart are:</p> <p>(1) Each kiln including alkali bypasses, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part;</p> <p>(2) Each clinker cooler at any portland cement plant;</p> <p>(3) Each raw mill at any portland cement plant;</p> <p>(4) Each finish mill at any portland cement plant;</p> <p>(5) Each raw material dryer at any portland cement plant;</p> <p>(6) Each raw material, clinker, or finished product storage bin at any portland cement plant;</p> <p>(7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant;</p> <p>(8) Each bagging and bulk loading and unloading system at any portland cement plant; and</p> <p>(9) Each open clinker pile at any portland cement plant.</p>

<p><b>§63.1340(c)</b></p>	<p>Crushers are not covered by this subpart regardless of their location.</p>
<p><b>§63.1340(d)</b></p>	<p>If you are subject to any of the provisions of this subpart you are also subject to title V permitting requirements.</p>
<p><b>§63.1342</b></p>	<p>The facility must comply with applicable general provisions requirements in subpart LLL as indicated by their cross references to 40 CFR part 63, subpart A, general provisions.          63.1(a)(1)-(4), (6)-(8), (10)-(14); 63.1(b)(2)-(3); 63.1(c)(1), (2), (4)-(5); 63.1(e);          63.2;          63.3(a)-(c);          63.4(a)(1)-(3), (5); 63.4(b)-(c);          63.5(a)(1)-(2); 63.5(b)(1), (3)-(6); 63.5(d)(1)-(4); 63.5(e); 63.5(f)(1)-(2);          63.6(a); 63.6(b)(1)-(5), (7); 63.6(c)(1)-(2), (5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(h)(2), (4)- (5)(i), (6)-(7);          63.6(i)(1)-(14), (16); 63.6(j);          63.7(a)(1)-(3); 63.7(b); 63.7(c); 63.7(d); 63.7(e)(2)-(4); 63.7(f); 63.7(g); 63.8(h);          63.8(a)(1); 63.8(b)(1)-(3); 63.8(c)(1)-(8); 63.8(d); 63.8(e); 63.8(f); 63.8(g);          63.9(a); 63.9(b); 63.9(c); 63.9(d); 63.9(e); 63.9(f); 63.9(g); 63.9(h)(1)-(3), (5)-(6); 63.9(i); 63.9(j);          63.10(a); 63.10(b)(1), (2)(iii), (2)(vi)-(ix); 63.10(c)(1), (5)-(8), (10)-(15); 63.10(d)(1)-(4); 63.10(e)(1)-(3);          63.10(f)          63.12(a)-(c)          63.13(a)-(c)          63.14(a)-(b)          63.15(a)-(b)</p>
<p><b>§63.1343(a)</b></p>	<p><i>General.</i> The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, and raw material dryer. All dioxin D/F, HCl, and total hydrocarbon (THC) emission limits are on a dry basis. The D/F, HCl and THC limits for kilns are corrected to 7 percent oxygen except during periods of startup and shutdown. The raw material dryer THC limits are corrected to 19 percent oxygen except during startup and shutdown. During startup and shutdown no oxygen correction is applied. All (THC) emission limits are measured as propane. Standards for mercury, PM, and THC are based on a 30-day rolling average, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. The 30-day and 7-day periods mean 30 and 7 consecutive operating days, respectively, where an operating day is any daily 24-hour period during which the kiln operates. Data attributed to an operating day includes all valid data obtained during the daily 24-hour period and excludes any measurements made when the kiln was not operating. If using a CEMS to determine compliance with the HCl standard, this standard is based on a 30-day rolling average, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. You must ensure appropriate corrections for moisture are made when measuring flowrates used to calculate particulate matter (PM) and mercury emissions.</p>



**Standards for kilns, clinker coolers, raw material dryers, and open clinker piles. §63.1343**

<p><b>§63.1343(b)(1)</b></p>	<p><i>Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.</i> The emission limits for these sources are shown in table 1 below.</p>																																																						
<p><b>§63.1343(b)(1)</b> <b>Table 1</b></p>	<p align="center"><b>Table 1—Emissions Limits for Kilns (Rows 1 and 3), Clinker Coolers (Rows 9 and 10), Raw Material Dryers (Rows 13 and 14)</b></p> <table border="1" data-bbox="365 432 1503 1213"> <thead> <tr> <th></th> <th><b>If your source is</b></th> <th><b>And the operating mode is:</b></th> <th><b>And if is located</b></th> <th><b>Your emissions limits are:</b></th> <th><b>And the units of the emissions limit are:</b></th> <th><b>The oxygen correction factor is:</b></th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>An existing kiln</td> <td>Normal operation</td> <td>At an area source</td> <td>PM—0.04 D/F—0.2<sup>1</sup> Mercury—55 THC—24<sup>2,3</sup></td> <td>lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd</td> <td>NA. 7 percent. NA. 7 percent.</td> </tr> <tr> <td>3.</td> <td>An existing kiln</td> <td>Startup and shutdown</td> <td>At an area source</td> <td>PM—0.004 D/F—0.2<sup>1</sup> Mercury—10 THC—24<sup>2,3</sup></td> <td>gr/dscf ng/dscm (TEQ) ug/dscm ppmvd</td> <td>NA. NA. NA. NA.</td> </tr> <tr> <td>9.</td> <td>An existing clinker cooler</td> <td>Normal operation</td> <td>At an area source</td> <td>PM—0.04</td> <td>lb/ton clinker</td> <td>NA.</td> </tr> <tr> <td>10.</td> <td>An existing clinker cooler</td> <td>Startup and shutdown</td> <td>At an area source</td> <td>PM—0.004</td> <td>gr/dscf</td> <td>NA.</td> </tr> <tr> <td>13.</td> <td>An existing or new raw material dryer</td> <td>Normal operation</td> <td>At an area source</td> <td>THC—24<sup>2,3</sup></td> <td>ppmvd</td> <td>19 percent.</td> </tr> <tr> <td>14.</td> <td>An existing or new raw material dryer</td> <td>Startup and shutdown</td> <td>At an area source</td> <td>THC—24<sup>2,3</sup></td> <td>ppmvd</td> <td>NA.</td> </tr> </tbody> </table> <p><sup>1</sup>If the average temperature at the inlet to the first particulate matter control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.4 ng/dscm (TEQ).</p> <p><sup>2</sup>Measured as propane.</p> <p><sup>3</sup>Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 9 ppmvd for total organic HAP. If the source demonstrates compliance with the total organic HAP under the requirements of §63.1349 then the source's THC limit will be adjusted to equal the average THC emissions measured during the organic HAP compliance test.</p>							<b>If your source is</b>	<b>And the operating mode is:</b>	<b>And if is located</b>	<b>Your emissions limits are:</b>	<b>And the units of the emissions limit are:</b>	<b>The oxygen correction factor is:</b>	1.	An existing kiln	Normal operation	At an area source	PM—0.04 D/F—0.2 <sup>1</sup> Mercury—55 THC—24 <sup>2,3</sup>	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.	3.	An existing kiln	Startup and shutdown	At an area source	PM—0.004 D/F—0.2 <sup>1</sup> Mercury—10 THC—24 <sup>2,3</sup>	gr/dscf ng/dscm (TEQ) ug/dscm ppmvd	NA. NA. NA. NA.	9.	An existing clinker cooler	Normal operation	At an area source	PM—0.04	lb/ton clinker	NA.	10.	An existing clinker cooler	Startup and shutdown	At an area source	PM—0.004	gr/dscf	NA.	13.	An existing or new raw material dryer	Normal operation	At an area source	THC—24 <sup>2,3</sup>	ppmvd	19 percent.	14.	An existing or new raw material dryer	Startup and shutdown	At an area source	THC—24 <sup>2,3</sup>	ppmvd	NA.
	<b>If your source is</b>	<b>And the operating mode is:</b>	<b>And if is located</b>	<b>Your emissions limits are:</b>	<b>And the units of the emissions limit are:</b>	<b>The oxygen correction factor is:</b>																																																	
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<p><b>§63.1343(b)(2)</b></p>	<p>When there is an alkali bypass associated with a kiln, the combined PM emissions from the kiln or in-line kiln/raw mill and the alkali bypass stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust with the kiln exhaust for energy efficiency purposes 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 equation 1 of this section:</p> $PM_{\text{alt}} = 0.004 \times 1.65 \times (Q_k + Q_c) / 7000 \quad (\text{Eq. 1})$ <p>Where:</p> <p>0.004 is the PM exhaust concentration (gr/dscf) equivalent to 0.04 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.</p>																																																						

	<p>1.65 is the conversion factor of lb feed per lb clinker</p> <p><math>Q_k</math> is the exhaust flow of the kiln (dscf/ton raw feed)</p> <p><math>Q_c</math> is the exhaust flow of the clinker cooler (dscf/ton raw feed).</p> <p>For new kilns that combine kiln exhaust and clinker cooler gas the limit is calculated using the equation 2 of this section:</p> $PM_{2.5} = 0.0008 \times 1.65 \times (Q_k + Q_c) / 7000 \quad (\text{Eq. 2})$ <p>Where:</p> <p>0.0008 is the PM exhaust concentration (gr/dscf) equivalent to 0.01 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined</p> <p>1.65 is the conversion factor of lb feed per lb clinker</p> <p><math>Q_k</math> is the exhaust flow of the kiln (dscf/ton raw feed)</p> <p><math>Q_c</math> is the exhaust flow of the clinker cooler (dscf/ton raw feed).</p>
<p><b>§63.1343(c)</b></p>	<p>If clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:</p> <ol style="list-style-type: none"> <li>(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.</li> <li>(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.</li> <li>(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.</li> <li>(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.</li> </ol>
<p><b>§63.1343(d)</b></p>	<p>If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.</p>
<p><b>§63.1343(e)</b></p>	<p>Emissions limits in effect prior to September 9, 2010. Any source defined as an existing source in §63.1351, and that was subject to a PM, mercury, THC, D/F, or opacity emissions limit prior to September 9, 2010, must continue to meet the limits shown in Table 2 to this section until September 9, 2013.</p>

<b>§63.1343(e) Table 2</b>	<b>Table 2</b>				
	Emissions Limits in Effect Prior to September 9, 2010, for Kilns (Row 3) and Raw Material Dryers (Row 8)				
	<b>If your source is</b>	<b>and</b>	<b>And if it is located at</b>	<b>Your emissions limits are<sup>1</sup>:</b>	<b>And the units of the emissions limit are:</b>
3. An existing kiln	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	D/F—0.2 <sup>2</sup> THC—50 <sup>34</sup>	ng/dscm (TEQ) ppmvd.	
8. An existing raw material dryer	it commenced construction or reconstruction on or prior to December 2, 2005	An area source	THC—50 <sup>34</sup>	ppmvd.	

<sup>1</sup>All emission limits expressed as a concentration basis (ppmvd, ng/dscm) are corrected to seven percent oxygen.

<sup>2</sup>If the average temperature at the inlet to the first particulate matter control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less, this limit is changed to 0.4 ng/dscm (TEQ).

<sup>3</sup>Measured as propane.

<sup>4</sup>Only applies to Greenfield kilns or raw material dryers.

**Emissions limits for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills, and open clinker piles. § 63.1345**

<b>§63.1345</b>	The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.
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**Operating limits for kilns. §63.1346**

<b>§63.1346(a)</b>	<p>The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:</p> <p>(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) of this section and established during the performance test when the raw mill was operating is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.</p> <p>(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) of this section 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.</p> <p>(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.</p>
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<b>§63.1346(b)</b>	The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).
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**Operation and maintenance plan requirements. §63.1347**

<b>§63.1347(a)</b>	<p>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:</p> <p>(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;</p> <p>(2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);</p> <p>(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.</p>
<b>§63.1347(b)</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.

**Compliance Requirements. §63.1348**

<b>§63.1348(a)</b>	<p><i>Initial compliance requirements.</i> For an affected source subject to this subpart, you must demonstrate initial compliance with the emissions standards and operating limits by using the test methods and procedures in §§63.1349 and 63.7.</p> <p>(1) <i>PM compliance.</i> If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate initial compliance with the PM emissions standards by using the test methods and procedures in §63.1349(b)(1).</p> <p>(i) You must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(1)(i).</p> <p>(ii) Compliance with the PM emissions standard must be determined based on the first 30 operating days you operate a PM CEMS.</p> <p>(2) <i>Opacity compliance.</i> If you are subject to the limitations on opacity under §63.1345, you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in §63.1349(b)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.</p> <p>(3) <i>D/F compliance.</i> (i) If you are subject to limitations on D/F emissions under §63.1343(b), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in §63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance.</p> <p>(ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the temperature operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(ii) through (b)(3)(iv). The average of the run temperatures will determine the applicable temperature limit.</p> <p>(4)(i) <i>THC compliance.</i> If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate initial compliance with the THC emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(i). The average THC concentration obtained during the first 30 operating days must be used to determine initial compliance.</p>
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	<p>(ii) <i>Total organic HAP emissions tests.</i> If you elect to demonstrate compliance with the total organic HAP emissions limit under §63.1343(b) in lieu of the THC emissions limit, you must demonstrate initial compliance with the total organic HAP emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(iii) and (b)(4)(iv).</p> <p>(iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in §63.1349(b)(4)(iii) while the raw mill kiln is operating and while the raw mill of the kiln is not operating.</p> <p>(iv) The average total organic HAP concentration measured during the initial performance test specified by §63.1349(b)(4)(iii) must be used to determine initial compliance.</p> <p>(v) The average THC concentration measured during the initial performance test specified by §63.1349(b)(4)(iv) must be used to determine the site-specific THC limit. This limit should be a weighted average of the THC levels measured during raw mill on and raw mill off testing.</p> <p>(5) <i>Mercury compliance.</i> If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate initial compliance with the mercury standards by using the performance test methods and procedures in §63.1349(b)(5). You must demonstrate initial compliance by operating a mercury CEMS or a sorbent trap based integrated monitor. The first 30 operating days of daily mercury concentration data must be used to determine initial compliance.</p>
<p><b>§63.1348(b)</b></p>	<p><i>Continuous compliance requirements.</i> You must demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.</p> <p>(1) <i>General requirements.</i> (i) You must monitor and collect data according to §63.1350 and the site-specific monitoring plan required by §63.1350(o).</p> <p>(ii) 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), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating. Any period for which data collection is required and the operation of the CEMS is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.</p> <p>(iii) You may not use data recorded during 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. The owner or operator must use all the data collected during all other periods in assessing the operation of the control device and associated control system</p> <p>(iv) <i>Clinker production.</i> If you are subject to limitations on PM emissions (lb/ton of clinker) or mercury (lb/MM tons of clinker) under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by determining the hourly production rate of clinker according to the requirements of §63.1350(d).</p> <p>(2) <i>PM compliance.</i> If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) and (d).</p> <p>(i) <i>PM CEMS.</i> You must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) for each affected source subject to PM emissions limitations. Continuous compliance is demonstrated by a 30-day rolling average PM emissions in lb/ton clinker, except for periods of startup and shutdown, where the compliance is demonstrated based on a 7-day rolling average.</p>

	<p>(3) <i>Opacity compliance.</i> If you are subject to the limitations on opacity under §63.1345, you must demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in §63.1350(f).</p> <p>(i) Continuous compliance is demonstrated by conducting specified visible emissions observations and follow up opacity readings, as indicated in §63.1350(f)(1) and (f)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard. Corrective actions must be initiated within one hour of detecting visible emissions.</p> <p>(ii) <i>COMS.</i> If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the COMS such that it meets the requirements of §63.1350(f)(4)(i).</p> <p>(iii) <i>BLDS.</i> If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the BLDS such that it meets the requirements of §63.1350(f)(4)(ii).</p> <p>(4) <i>D/F compliance.</i> If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the temperature operating limits specified in §63.1346 by using the installing, operating, and maintaining a continuous monitor to record the temperature of specified gas streams such that it meets the requirements of §63.1350(g). Continuous compliance is demonstrated by a 3-hour rolling average temperature.</p> <p>(6) <i>THC compliance.</i> If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate continuous compliance with the THC emissions standards by using the monitoring methods and procedures in §63.1350 (i) and (j). Continuous compliance is demonstrated by a 30-day rolling average THC concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.</p> <p>(7) <i>Mercury compliance.</i> If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate continuous compliance with the mercury standards by using the monitoring methods and procedures in §63.1350(k). Continuous compliance is demonstrated by a 30-day rolling average mercury emission rate in lb/MM tons clinker, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average mercury concentration.</p>
<p><b>§63.1348(c)</b></p>	<p><i>Changes in operations.</i> (1) 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 this subpart, the source must conduct a performance test as specified in §63.1349(b).</p> <p>(2) In preparation for and while conducting a performance test required in §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 (c)(2)(i) through (c)(2)(iv) of this section are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.</p> <p>(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart 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 (c)(1) of this section, including when the planned operational change period would begin.</p> <p>(ii) The performance test results must be documented in a test report according to §63.1349(a).</p> <p>(iii) A test plan must be made available to the Administrator prior to performance testing, if requested.</p> <p>(iv) The performance test must be conducted completed within 360 hours after the planned operational change period begins.</p>

<b>§63.1348(d)</b>	<i>General duty to minimize emissions.</i> 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.
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**Performance testing requirements. §63.1349**

<b>§63.1349(a)</b>	<p>Performance test results must be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), the site-specific plan to be followed during performance testing must be made available to the Administrator prior to testing, if requested.</p> <ol style="list-style-type: none"> <li>(1) A brief description of the process and the air pollution control system;</li> <li>(2) Sampling location description(s);</li> <li>(3) A description of sampling and analytical procedures and any modifications to standard procedures;</li> <li>(4) Test results;</li> <li>(5) Quality assurance procedures and results;</li> <li>(6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;</li> <li>(7) Raw data sheets for field sampling and field and laboratory analyses;</li> <li>(8) Documentation of calculations;</li> <li>(9) All data recorded and used to establish parameters for monitoring; and</li> <li>(10) Any other information required by the performance test method.</li> </ol>
<b>§63.1349(b)</b>	<p>(1) <i>PM emissions tests.</i> (i)(A) If you are subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b).</p> <p>(B) You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in §63.1350(m)(5).</p> <p>(C) The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained.</p> <p>(ii) You must determine the clinker production rate using the methods in §63.1350(d).</p> <p>(iii) The emission rate, E, of PM (lb/ton of clinker) must be computed for each run using equation 3 of this section:</p> $E = (C_s Q_s) / (PK) \quad (\text{Eq. 3})$ <p>Where:</p> <p>E = emission rate of particulate matter, lb/ton of clinker production;</p> <p>C<sub>s</sub> = concentration of particulate matter, gr/scf;</p>

$Q_s$ = volumetric flow rate of effluent gas, where  $C_s$  and  $Q_s$  are on the same basis (either wet or dry), scf/hr;

$P$  = total kiln clinker production rate, ton/hr; and

$K$  = conversion factor, 7000 gr/lb.

(iv) When there is an alkali bypass associated with a kiln, the main exhaust and alkali bypass of the kiln must be tested simultaneously and the combined emission rate of particulate matter from the kiln and alkali bypass must be computed for each run using equation 4 of this section:

$$E_c = \frac{[(C_{sk} Q_{sk}) + (C_{sb} Q_{sb})]}{K P} \quad (\text{Eq. 4})$$

Where:

$E_c$ = combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, lb/ton of kiln clinker production;

$C_{sk}$ = concentration of particulate matter in the kiln or in-line kiln/raw mill effluent gas, gr/scf;

$Q_{sk}$ = volumetric flow rate of kiln or in-line kiln/raw mill effluent gas, where  $C_{sk}$  and  $Q_{sk}$  are on the same basis (either wet or dry), scf/hr;

$C_{sb}$ = concentration of particulate matter in the alkali bypass gas, gr/scf;

$Q_{sb}$ = volumetric flow rate of alkali bypass effluent gas, where  $C_{sb}$  and  $Q_{sb}$  are on the same basis (either wet or dry), scf/hr;

$P$  = total kiln clinker production rate, ton/hr; and

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

(2) *Opacity tests.* If you are subject to limitations on opacity under this subpart, you must conduct opacity tests in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

(i) There are no individual readings greater than 10 percent opacity;

(ii) There are no more than three readings of 10 percent for the first 1-hour period.

(3) *D/F emissions tests.* If you are subject to limitations on D/F emissions under this subpart, you must conduct a performance test using Method 23 of appendix A-7 to part 60 of this chapter. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass must conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. However, the owner or operator of an in-line kiln/raw mill may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.

(i) 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).

(ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and, where applicable, the temperature at the inlet to the alkali bypass 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.

(iii) Hourly average temperatures must be calculated for each run of the performance test.



(iv) 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 §63.1344(b).

(v)(A) If sorbent injection is used for D/F control, the rate of sorbent injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test in accordance with the conditions in §63.1350(m)(9), and the continuous injection rate record(s) must be included in the performance test report. Sorbent injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

(B) The performance test report must include the brand and type of sorbent used during the performance test.

(C) The owner or operator must maintain a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the performance test. If the carrier gas flow rate is used, the owner or operator must determine, record, and maintain a record of the accuracy of the carrier gas flow rate monitoring system according to the procedures in appendix A to part 75 of this chapter. If the carrier gas pressure drop is used, the owner or operator must determine, record, and maintain a record of the accuracy of the carrier gas pressure drop monitoring system according to the procedures in §63.1350(m)(6).

(vi) The run average sorbent injection rate must be calculated for each run and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with §63.1344(c)(1).

(4)(i) *THC CEMS relative accuracy test.* (A) If you are subject to limitations on THC emissions, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(1). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard

(B) The initial compliance test must be based on the first 30 operating days of operation in which the affected source operates using a CEMS.

(ii) *Total organic HAP emissions tests.* Instead of conducting the performance test specified in paragraph (b)(4)(i) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(4)(iii) through (b)(4)(iv) of this section.

(iii) Method 320 of appendix A to this part or ASTM D6348–03 (incorporated by reference— *See* §63.14) must be used 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 §63.7(e). Each run must be conducted for at least 1 hour.

(iv) At the same time that you are conducting the performance test for total organic HAP, you must also determine THC emissions by operating a CEMS in accordance with the requirements of §63.1350(j). The duration of the performance test must be 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated.

(5) *Mercury emissions tests.* If you are subject to limitations on mercury emissions, you must operate a mercury CEMS in accordance with the requirements of §63.1350(k). The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly mercury concentration and stack gas volumetric flow rate data must be obtained. If you use a sorbent trap monitoring system, daily data must be obtained with each day assumed to equal the daily average of the sorbent trap collection period covering that day.

(i) If you are using a mercury CEMS, 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 §63.1350(k)(4).

	<p>(ii) The emission rate must be computed by dividing the average mercury emission rate by the clinker production rate during the same 30-day rolling period using the equation 5 of this section:</p> $E = (C_s Q_s) / (PK) \quad (\text{Eq. 5})$ <p>Where:</p> <p>E = emission rate of mercury, lb/million tons of clinker production;</p> <p>C<sub>s</sub>= concentration of mercury, g/scm;</p> <p>Q<sub>s</sub>= volumetric flow rate of effluent gas, where C<sub>s</sub>and Q<sub>s</sub>are on the same basis (wet or dry), scm/hr;</p> <p>P = total kiln clinker production rate, million ton/hr; and</p> <p>K = conversion factor, 1000 g/kg (454 g/lb).</p>
<p><b>§63.1349(c)</b></p>	<p><i>Performance test frequency.</i> Except as provided in §63.1348(b), performance tests are required for affected sources that are subject to a dioxin, total organic HAP, or HCl, emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS.</p>
<p><b>§63.1349(d)</b></p>	<p><i>Performance test reporting requirements.</i></p> <p>(1) You must submit the information specified in paragraphs (d)(1)(i) and (d)(2) of this section no later than 60 days following the initial performance test. All reports must be signed by the facility's manager.</p> <p>(i) The initial performance test data as recorded under paragraph (b) of this section.</p> <p>(ii) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(3), (b)(4)(iii), (b)(5)(ii), and (b)(6)(i) of this section, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.</p> <p>(2) As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT) ( <i>see</i> <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.html/">http://www.epa.gov/ttn/chief/ert/ert_tool.html/</a> ).</p>
<p><b>§63.1349(e)</b></p>	<p>Performance tests must be conducted under such conditions as the Administrator 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 Administrator such records as may be necessary to determine the conditions of performance tests.</p>

**Monitoring requirements. §63.1350**

<p><b>§63.1350(a)</b></p>	<p>All continuous monitoring data for periods of startup and shutdown must be compiled and averaged separately from data gathered during periods of normal operation.</p>
<p><b>§63.1350(b)</b></p>	<p><i>PM monitoring requirements for sources using PM CEMS.</i> (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.</p>

	<p>(2) You must perform Relative Response Audits annually and Response Correlation Audits every 3 years.</p> <p>(3) If you are using a PM CEMS, 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 (n)(1) through (n)(10) of this section.</p> <p>(4) In order to calculate the 30-day or 7-day rolling average, collect readings at least every 15 minutes. Sum the hourly data to daily data and then into a 30-day rolling average. You must use all data, except those recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities, in calculations.</p>
<p><b>§63.1350(d)</b></p>	<p><i>Clinker production monitoring requirements.</i> If you are subject to an emissions limitation on particulate matter, mercury, NO<sub>x</sub>, or SO<sub>2</sub> emissions (lb/ton of clinker), you must:</p> <p>(1) Determine hourly clinker production by one of two methods:</p> <p>(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy.</p> <p>(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-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 determined for accounting purposes and recorded feed rates. This ratio must be updated 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.</p> <p>(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).</p> <p>(3) Record the daily clinker production rates and kiln feed rates; and</p> <p>(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.</p>
<p><b>§63.1350(f)</b></p>	<p><i>Opacity monitoring requirements.</i> If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of this section and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of this section and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of this section.</p> <p>(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.</p> <p>(ii) 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.</p>

(iii) 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.

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A-7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. 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.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A-7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section 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.

(2)(i) For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes.

(ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (a)(5)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (a)(5)(i) of the section, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes.

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

(4) The requirements under paragraph (f)(2) of this section to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).

(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.

	<p>(ii) If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply.</p>
<p><b>§63.1350(g)</b></p>	<p><i>D/F monitoring requirements.</i> If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs (g)(1) through (g)(6) and paragraphs (m)(1) through (m)(4) of this section to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) You must install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PMCDs.</p> <p>(i) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1349(b)(3)(iv).</p> <p>(ii) 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.</p> <p>(iii) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.</p> <p>(2) You must monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.</p> <p>(3) The required minimum data collection frequency must be one minute.</p> <p>(4) Each hour, calculate the three-hour average temperature for the previous 3 hours of process operation using all of the one-minute data available ( <i>i.e.</i>, the CMS is not out-of-control.)</p> <p>(5) 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.</p>
<p><b>§63.1350(i)</b></p>	<p><i>THC Monitoring Requirements.</i> If you are subject to an emissions limitation on THC emissions, you must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) You must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter.</p> <p>(2) For sources equipped with an alkali bypass stack, instead of installing a CEMS, you may use the results of the initial or subsequent performance test to demonstrate compliance with the THC emission limit.</p>
<p><b>§63.1350(j)</b></p>	<p><i>Total organic HAP monitoring requirements.</i> If you are complying with the total organic HAP emissions limits, you must continuously monitor THC according to paragraph (i)(1) and (2) or in accordance with Performance Specification 15 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. In addition, you must follow the monitoring requirements in paragraphs (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p>

<p><b>§63.1350(k)</b></p>	<p><i>Mercury monitoring requirements.</i> If you have a kiln or in-line kiln/raw mill subject to an emissions limitation on mercury emissions, you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter. You must continuously monitor mercury according to paragraphs (k)(1) through (k)(3) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) The span value for any Hg CEMS must include the intended upper limit of the mercury concentration measurement range during normal “mill on” operation which may be exceeded during “mill off” operation or other short term conditions lasting less than 24 consecutive kiln operating hours. However, the span should be at least equivalent to approximately two times the emissions standard and it may be rounded to the nearest multiple of 10 µg/m<sup>3</sup> of total mercury.</p> <p>(2) You must operate and maintain each Hg CEMS or sorbent trap-based integrated monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter.</p> <p>(3) Relative accuracy testing of mercury monitoring systems under Performance Specification 12A, Performance Specification 12B, or Procedure 5 must be at normal operating conditions with the raw mill on.</p> <p>(4) If you use a mercury CEMS, 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 (n)(1) through (n)(10) of this section.</p>
<p><b>§63.1350(m)</b></p>	<p><i>Parameter monitoring requirements.</i> If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.</p> <p>(1) 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.</p> <p>(2) You must conduct all monitoring in continuous operation at all times that the unit is operating.</p> <p>(3) Determine the 3-hour block average of all recorded readings.</p> <p>(4) Record the results of each inspection, calibration, and validation check.</p> <p>(5) <i>Liquid flow rate monitoring requirements.</i> If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (m)(5)(i) through (iv) of this section.</p> <p>(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.</p> <p>(ii) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.</p> <p>(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.</p> <p>(iv) Conduct a flow sensor calibration check at least semiannually.</p> <p>(6) <i>Specific pressure monitoring requirements.</i> If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (m)(6)(i) through (vi) of this section.</p> <p>(i) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.</p> <p>(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.</p>

(iii) 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.

(iv) Check pressure tap pluggage daily.

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

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

(7) *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 (m)(7)(i) through (iii) of this section.

(i) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.

(ii) Ensure the sample is properly mixed and representative of the fluid to be measured.

(iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.

(9) *Mass flow rate (for sorbent injection) monitoring requirements.* If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (m)(9)(i) through (iii) of this section.

(i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.

(ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.

(iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.

(10) *Bag leak detection monitoring requirements.* If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.

(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.

(ii) Each bag leak detection system 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.

(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.

(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.

(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.

(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.

(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.

(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

	<p>(11) 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:</p> <ul style="list-style-type: none"> <li>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</li> <li>(ii) Sealing off defective bags or filter media;</li> <li>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</li> <li>(iv) Sealing off a defective fabric filter compartment;</li> <li>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</li> <li>(vi) Shutting down the process producing the PM emissions.</li> </ul>
<p><b>§63.1350(n)</b></p>	<p><i>Continuous emissions rate monitoring system.</i> You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) and (2) of this section, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit.</p> <ul style="list-style-type: none"> <li>(1) 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 or PM 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.</li> <li>(2) 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.</li> <li>(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.</li> <li>(4) 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 (n)(1) of this section.</li> <li>(5) 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.</li> <li>(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.</li> <li>(7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) ( <i>see</i> sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of this chapter for a discussion of CD).</li> <li>(i) 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).</li> <li>(ii) 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.</li> <li>(8) 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 (n)(8)(i) and (n)(8)(ii) of this section.</li> </ul>



	<p>(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.</p> <p>(ii) 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.</p> <p>(9) 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).</p> <p>(10) 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).</p>
<p><b>§63.1350(o)</b></p>	<p><i>Alternate monitoring requirements approval.</i> You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.</p> <p>(1) 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.</p> <p>(2) 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.</p> <p>(3) 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 (m)(3)(i) through (iii) of this section:</p> <p>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;</p> <p>(ii) 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</p> <p>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.</p> <p>(4) 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:</p> <p>(i) Notice of the information and findings upon which the intended disapproval is based; and</p> <p>(ii) 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.</p> <p>(5) 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.</p>

	<p>(6) 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.</p>
<p><b>§63.1350(p)</b></p>	<p><i>Development and submittal (upon request) of monitoring plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (n) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (o)(5) of this section.</p> <p>(1) 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 (o)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.</p> <p>(i) 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);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p> <p>(5) <i>BLDS monitoring plan.</i> Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;</p> <p>(i) Installation of the BLDS;</p> <p>(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;</p> <p>(iii) Operation of the BLDS, including quality assurance procedures;</p> <p>(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;</p> <p>(v) How the BLDS output will be recorded and stored.</p>

**Additional test methods. § 63.1352**

<b>§63.1352</b>	(b) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at Portland cement manufacturing facilities, solely for use in applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.
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**Notification Requirements. §63.1353**

<b>§63.1353(a)</b>	The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in §63.1342. If any State requires a notice that contains all of 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.
<b>§63.1353(b)</b>	<p>Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:</p> <p>(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.</p> <p>(2) Notification of performance tests, as required by §§63.7 and 63.9(e).</p> <p>(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).</p> <p>(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.</p> <p>(5) Notification of compliance status, as required by §63.9(h).</p>

**Reporting Requirements. §63.1354**

<b>§63.1354(a)</b>	(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. 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>§63.1354(b)</b>	<p>The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:</p> <p>(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.</p> <p>(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.</p> <p>(3) As required by §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 §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.</p>

	<p>(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and</p> <p>(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.</p> <p>(6) As required by §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 §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.</p> <p>(7) As required by §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 §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).</p> <p>(8) As required by §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.</p>
	<p>(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:</p> <ul style="list-style-type: none"> <li>(i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);</li> <li>(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and</li> <li>(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).</li> <li>(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).</li> <li>(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).</li> <li>(vi) Monthly rolling average mercury, THC, PM, and HCl (if applicable) emissions levels in the units of the applicable emissions limit for each kiln, clinker cooler, and raw material dryer.</li> </ul> <p>(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten 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.</p>

<b>§63.1354(c)</b>	The semiannual report required by paragraph (b)(9) of this section must 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. 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 §63.1348(d), including actions taken to correct a malfunction.
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**Recordkeeping Requirements. §63.1355**

<b>§63.1355(a)</b>	The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §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>§63.1355(b)</b>	<p>The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and</p> <p>(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;</p> <p>(2) All records of applicability determination, including supporting analyses; and</p> <p>(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.</p>
<b>§63.1355(c)</b>	In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).
<b>§63.1355(d)</b>	You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.
<b>§63.1355(e)</b>	You must keep records of the daily clinker production rates and kiln feed rates.
<b>§63.1355(f)</b>	You must keep records of the occurrence and duration of each startup or shutdown.
<b>§63.1355(g)</b>	<p>(1) You must keep records of the occurrence and duration of each malfunction of operation ( <i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</p> <p>(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p>

**Implementation and enforcement. § 63.1358**

<b>§63.1358</b>	<p>(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.</p> <p>(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.</p>
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(c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.

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

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

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

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**FEDERAL REGULATIONS  
NESHAP SUBPART ZZZZ**

**National Emissions Standards for Hazardous Air Pollutants for Stationary  
Reciprocating Internal Combustion Engines**

Subject Emission Units Permit Number	All equipment listed in the following permits: 1147027, 1147028, and 1147030.
<b>§63.6585(a)</b>	A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.
<b>§63.6585(b)</b>	A major source of HAP emissions is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAP at a rate of 25 tons (22.68 megagrams) or more per year, except that for oil and gas production facilities, a major source of HAP emissions is determined for each surface site.
<b>§63.6585(c)</b>	An area source of HAP emissions is a source that is not a major source.
<b>§63.6585(d)</b>	If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.
<b>§63.6585(e)</b>	If you are an owner or operator of a stationary RICE used for national security purposes, you may be eligible to request an exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C.

**Compliance §63.6595**

<b>§63.6595(a)(1)</b>	If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013.
<b>§63.6595(a)(5)</b>	If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source.
<b>§63.6595(a)(6)</b>	If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008.

<p><b>§63.6605(a)</b></p>	<p>You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.</p>
<p><b>§63.6605(b)</b></p>	<p>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. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this 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, review of operation and maintenance records, and inspection of the source.</p>
<p><b>§63.6630(a)</b></p>	<p>You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart.</p>
<p><b>§63.6630(c)</b></p>	<p>You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.</p>
<p><b>§63.6640(a)</b></p>	<p>You must demonstrate continuous compliance with each emission limitation and operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.</p>
<p><b>§63.6640(d)</b></p>	<p>For new, reconstructed, and rebuilt stationary RICE, deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a).</p>
<p><b>§63.6640(f)</b></p>	<p><i>Requirements for emergency stationary RICE.</i> (1) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, a new or reconstructed emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions that was installed on or after June 12, 2006, or an existing emergency stationary RICE located at an area source of HAP emissions, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1)(i) through (iii) of this section. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)(i) through (iii) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1)(i) through (iii) of this section, the engine will not be considered an emergency engine under this subpart and will need to meet all requirements for non-emergency engines.</p> <p>(i) There is no time limit on the use of emergency stationary RICE in emergency situations.</p> <p>(ii) You may operate your emergency stationary RICE 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.</p> <p>(iii) You may operate your emergency stationary RICE up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the</p>



	<p>facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph (f)(1)(iii), as long as the power provided by the financial arrangement is limited to emergency power.</p>
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**Emission limitations for new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions? §63.6601**

<p><b>§63.6601</b></p>	<p>Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart. If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at major source of HAP emissions manufactured on or after January 1, 2008, you must comply with the emission limitations in Table 2a to this subpart and the operating limitations in Table 2b to this subpart which apply to you.</p>
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**Emission limitations for existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions. §63.6602**

<p><b>§63.6602</b></p>	<p>If you own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, you must comply with the emission limitations in Table 2c to this subpart which apply to you. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in §63.6620 and Table 4 to this subpart.</p>
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**Emission limitations and operating limitations for existing stationary RICE located at an area source of HAP emissions. §63.6603**

<p><b>§63.6603(a)</b></p>	<p>(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 1b and Table 2b to this subpart that apply to you.</p>
<p><b>§63.6603(b)</b></p>	<p>If you own or operate an existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the Federal Aid Highway System (FAHS) you do not have to meet the numerical CO emission limitations specified in Table 2d to this subpart. Existing stationary non-emergency CI RICE greater than 300 HP located at area sources in areas of Alaska not accessible by the FAHS must meet the management practices that are shown for stationary non-emergency CI RICE less than or equal to 300 HP in Table 2d to this subpart.</p>

**Testing and initial compliance requirements. §63.6611**

<p><b>§63.6611</b></p>	<p>If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate.</p>
<p><b>§63.6612</b></p>	<p>If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of § 63.6612(b).</p>

<p><b>§63.6612(b)</b></p>	<p>An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section.</p> <p>(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.</p> <p>(2) The test must not be older than 2 years.</p> <p>(3) The test must be reviewed and accepted by the Administrator.</p> <p>(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.</p>
<p><b>§63.6620(a)</b></p>	<p>You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you.</p>
<p><b>§63.6620(b)</b></p>	<p>Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again.</p>
<p><b>§63.6620(d)</b></p>	<p>You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour.</p>
<p><b>§63.6620(e)(1)</b></p>	<p>You must use Equation 1 of this section to determine compliance with the percent reduction requirement:</p> $\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$ <p>Where:</p> <p><math>C_i</math> = concentration of CO or formaldehyde at the control device inlet,  <math>C_o</math> = concentration of CO or formaldehyde at the control device outlet, and  <math>R</math> = percent reduction of CO or formaldehyde emissions.</p> <p>(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO<sub>2</sub>). If pollutant concentrations are to be corrected to 15 percent oxygen and CO<sub>2</sub> concentration is measured in lieu of oxygen concentration measurement, a CO<sub>2</sub> correction factor is needed. Calculate the CO<sub>2</sub> correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.</p> <p>(i) Calculate the fuel-specific <math>F_o</math> value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:</p> $F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$ <p>Where:</p> <p><math>F_o</math> = Fuel factor based on the ratio of oxygen volume to the ultimate CO<sub>2</sub> volume produced by the fuel at zero percent excess air.</p> <p>0.209 = Fraction of air that is oxygen, percent/100.</p> <p><math>F_d</math> = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> / J (dscf/10<sup>6</sup> Btu).</p>

	<p><math>F_c</math> = Ratio of the volume of CO<sub>2</sub> produced to the gross calorific value of the fuel from Method 19, dsm<sup>3</sup> / J (dscf/10<sup>6</sup> Btu).</p> <p>(ii) Calculate the CO<sub>2</sub> correction factor for correcting measurement data to 15 percent oxygen, as follows:</p> $X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$ <p>Where:</p> <p><math>X_{CO_2}</math> = CO<sub>2</sub> correction factor, percent.                      5.9 = 20.9 percent O<sub>2</sub> - 15 percent O<sub>2</sub>, the defined O<sub>2</sub> correction value, percent.</p> <p>(iii) Calculate the NO<sub>x</sub> and SO<sub>2</sub> gas concentrations adjusted to 15 percent O<sub>2</sub> using CO<sub>2</sub> as follows:</p> $C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$ <p>Where:</p> <p>%CO<sub>2</sub> = Measured CO<sub>2</sub> concentration measured, dry basis, percent.</p>
<p><b>§63.6620(f)</b></p>	<p>If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.</p>
<p><b>§63.6620(g)</b></p>	<p>If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.</p> <ol style="list-style-type: none"> <li>(1) Identification of the specific parameters you propose to use as operating limitations;</li> <li>(2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions;</li> <li>(3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;</li> <li>(4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and</li> <li>(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.</li> </ol>
<p><b>§63.6620(h)</b></p>	<p>If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.</p> <ol style="list-style-type: none"> <li>(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally ( e.g., operator adjustment, automatic controller adjustment, etc.) or unintentionally ( e.g., wear and tear, error, etc.) on a routine basis or over time;</li> <li>(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;</li> <li>(3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions;</li> </ol>

	<p>(4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations;</p> <p>(5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments;</p> <p>(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and</p> <p>(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations.</p>
<b>§63.6620(i)</b>	<p>The engine percent load during a performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.</p>
<b>§63.6630(h)</b>	<p>During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you.</p>

**Monitoring, installation, collection, operation, and maintenance requirements. §63.6625**

<b>§63.6625(e)</b>	<p>If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop 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:</p>
<b>§63.6625(e)(2)</b>	<p>An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions;</p>
<b>§63.6625(e)(3)</b>	<p>An existing emergency or black start stationary RICE located at an area source of HAP emissions;</p>
<b>§63.6625(e)(4)</b>	<p>An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions;</p>
<b>§63.6625(e)(7)</b>	<p>An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions;</p>
<b>§63.6625(f)</b>	<p>If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.</p>
<b>§63.6625(h)</b>	<p>If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.</p>

<b>§63.6630(c)</b>	You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645.
<b>§63.6635(a)</b>	If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
<b>§63.6635(b)</b>	Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. 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.
<b>§63.6635(c)</b>	You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

**Notifications, Reports, and Records. §63.6645**

<b>§63.6645(a)</b>	You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following;
<b>§63.6645(a)(1)</b>	An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions.
<b>§63.6645(a)(2)</b>	An existing stationary RICE located at an area source of HAP emissions.
<b>§63.6645(a)(5)</b>	This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards.
<b>§63.6645(f)</b>	If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).
<b>§63.6645(g)</b>	If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1).
<b>§63.6645(h)</b>	If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii).  (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.  (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).
<b>§63.6650(a)</b>	You must submit each report in Table 7 of this subpart that applies to you.

<p><b>§63.6650(b)</b></p>	<p>(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section.</p> <p>(1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595.</p> <p>(2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.</p> <p>(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.</p> <p>(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.</p> <p>(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.</p> <p>(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.</p> <p>(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.</p> <p>(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.</p> <p>(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.</p>
<p><b>§63.6650(c)</b></p>	<p>The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.</p> <p>(1) Company name and address.</p> <p>(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</p> <p>(3) Date of report and beginning and ending dates of the reporting period.</p> <p>(4) If you had a malfunction during the reporting period, the compliance report must 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. 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 §63.6605(b), including actions taken to correct a malfunction.</p> <p>(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.</p>

	(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period
<b>§63.6655(a)</b>	<p>If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.</p> <p>(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).</p> <p>(2) Records of the occurrence and duration of each malfunction of operation ( <i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</p> <p>(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).</p> <p>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.</p> <p>(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p>
<b>§63.6655(f)</b>	<p>If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep 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 demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p> <p>(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p> <p>(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p>
<b>§63.6660(a)</b>	Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).
<b>§63.6660(b)</b>	As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
<b>§63.6660(c)</b>	You 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, according to §63.10(b)(1).

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## **Appendix A**

### **PSD Conditions – Permit # SE 94-01**

#### **Special Conditions – Plant Modernization**

##### **A. Certification**

Lehigh Southwest Cement Company shall notify the EPA in writing of compliance with Special Condition X.E. and shall make such notification within (15) days of such compliance. This letter must be signed by a responsible representative of the Lehigh Southwest Cement Company.

##### **B. Performance Tests**

1. Lehigh Southwest Cement Company shall conduct performance tests for CO in conjunction with the annual testing performed by Lehigh Southwest for the Eastern Kern Air Pollution Control District Permit and at such other times as specified by the EPA. Lehigh Southwest Cement Company shall furnish the EPA (Attn: AIR-3) a written report of the results of such tests. The tests for CO shall be conducted on an annual basis and at the maximum operating capacity of the facilities being tested. Upon written request (Attn: AIR-3) from Lehigh Southwest Cement Company, EPA may approve the conducting of performance test as a lower specified production rate. After initial performance tests and upon written request and adequate justification from Lehigh Southwest Cement Company, EPA may waive a specified annual test for the facility.
2. Performance tests for the emissions of CO shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR 60, Part 60.8 and Appendix A. Performance tests for the emissions of CO shall be conducted using EPA Methods 1-4 and 10.

The EPA (Attn: AIR-3) shall be notified in writing at least 30 days prior to such test to allow time for the development of an approvable performance test plan and to arrange for an observer to be present at the test.

Such prior approval shall minimize the possibility of EPA rejection of test results for procedural deficiencies. In lieu of the above-mentioned test methods, equivalent methods may be used with prior written approval from the EPA.

3. For performance test purposes, sampling ports, platforms and access shall be provided by Lehigh Southwest Cement Company on the kiln exhaust stack and the coal mill stack in accordance with 40 CFR 60.8(e).

##### **C. Performance Testing for Dioxin/furan Emissions**

1. Within 180 days of the promulgation date of the National Emission Standards for Hazardous Air Pollutants for Portland Cement manufacturing plants (40 CFR Part 63), Lehigh Southwest Cement Company shall conduct performance test for dioxin/furan emissions and furnish the EPA (Attn: AIR-3) with a written report on the results of such tests.



2. Performance tests for dioxin/furan emissions shall be conducted and the results reported in accordance with the test methods set forth in 40 CFR 60, Part 60.8 and Appendix A and in 40 CFR Part 63. Performance tests for dioxin/furan emissions shall be conducted using EPA Methods 1, 3, and 23 or those methods specified by the MACT standard.
3. EPA will review the results of these tests to determine whether further action is necessary.

**D. Emission Limits for CO**

On and after the date of startup, Lehigh Southwest Cement Company shall not discharge or cause the discharge of CO into the atmosphere from the kiln and coal mill stacks in excess of the following amounts:

1. 3,033 lbs/hr averaged over a 3 hours period.
2. 2,135 lbs/hr averaged over an 8 hour period.
3. 1,282 lbs/hr averaged over a 24 hour period.
4. 900 lbs/hr, 365 day rolling average calculated daily.

EPA may set a new lower allowable emission rate for the above emission limits after reviewing the performance test results or the initial CO monitoring data required under Special Condition B and E.

If the CO emission limit is revised, the difference between the CO emission limit set forth above and a revised lower CO emission limit shall not be allowed as an emission offset for future construction or modification.

**E. Continuous Emission Monitoring**

1. Prior to the date of startup and thereafter, Lehigh Southwest Cement Company shall install, maintain and operate the following continuous monitoring systems:
  - a. A continuous monitoring system to measure stack gas CO concentrations to be located in the main stack. The system shall meet EPA monitoring performance specification (40 CFR 60.13 and 40 CFR 60, Appendix B, Performance Specification 2, 3, and 4).
  - b. A continuous monitoring system to measure stack gas volumetric flow rates to be located at the preheater outlet. The system shall meet EPA performance specifications (40 CFR Part 52, Appendix E). However, if, because of its location, the flow meter cannot meet the requirements of Appendix E, Lehigh Southwest shall have one year from the date of permit issuance to install a new flow meter at a new location that will meet the requirements of Appendix E.

2. Lehigh Southwest Cement Company shall maintain a file of all measurements, including continuous monitoring systems evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; performance and all other information required by 40 CFR 60 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, report and records.
3. Lehigh Southwest Cement Company shall, upon the request of EPA, submit a written report on the results of the performance test on the main stack CO continuous emission monitor.
4. Lehigh Southwest Cement Company shall submit a written report of all excess emissions to EPA (Attn: AIR-3) for every calendar quarter. The report shall include the following:
  - a. The magnitude of the excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and compilation of each time period of excess emissions.
  - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, or malfunctions of the kiln. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall also be reported.
  - c. 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.
  - d. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
  - e. Excess emissions shall be defined as any period during which the average emissions of CO, as measured by the CEM, exceeds the maximum emission limits set forth in Conditions X.D. CO emissions during periods when the continuous emission monitor is inoperative shall be determined using the following procedure:
    - (1) Where N is the number of hours of missing emissions data, Lehigh Southwest shall determine the substitute hourly CO emissions in pounds per hour by averaging the measured values for the 1N hours immediately before the missing data period and the 1N hours immediately after the missing data period.
    - (2) Where 1N hours before or after the missing data period includes a missing data hour, the substituted value previously recorded for such hour(s) pursuant to this missing data procedure shall be used to determine the average in accordance with (1) above.
5. Excess emission indicated by the CEM system shall be considered violations of the applicable emission limit for the purpose of this permit.

6. The quality assurance project plan used by Lehigh Southwest Cement Company for the certification and operation of the continuous emissions monitor, which meets the requirements of 40 CFR Part 60, Appendix F, shall be available upon request to EPA.

**F. New Source Performance Standards**

The cement manufacturing facility is subject to the Standards of Performance for New Stationary Sources (NSPS) 40 CFR 60, Subpart F, including all emissions limits and notifications, testing, monitoring, and reporting requirements.

**Agency Notifications**

All correspondence as required by this Approval to Construct/Modify shall be forwarded to:

- A. Director, Air Division (Attn: AIR-3)  
U.S. Environmental Protection Agency  
75 Hawthorne Street  
San Francisco, CA 94105
- B. Chief, Stationary Source Division  
California Air Resources Board  
P.O. Box 2815  
Sacramento, CA 95812
- C. Air Pollution Control Officer  
Eastern Kern Air Pollution Control District  
2700 M Street, Suite 302  
Bakersfield, CA 93301

## Appendix B

### Compliance Air Monitoring (CAM)

#### **Purpose:**

*This Application Form is to assist the facility operator in supplying necessary monitoring information for meeting requirements of Title 40, Code of Federal Regulations, Part 64 (40 CFR Part 64) and Rule 201.1. A responsible official of a stationary source subject to Eastern Kern Air Pollution Control District (District) Rule 201.1 and subject to CAM shall use this form as part of an initial permit, a permit renewal, or significant permit modification to Title V permit or Compliance Assurance Monitoring.*

#### **Information Required:**

1. Describe the indicators to be monitored [Section 64.4(a)(1)];
2. Describe the ranges or the processes to set indicator ranges [Section 64.4(a)(2)];
3. Describe the performance criteria for monitoring [Section 64.4(a)(3)] including:
  - a. Specification for obtaining representative data;
  - b. Verification procedures to confirm the monitoring operational status;
  - c. Quality assurance and control procedures;
  - d. Monitoring frequency
    - i. 4 times per hour (minimum) if post control emissions are  $\geq$  MST<sup>1</sup>; or
    - ii. 1 time per day (minimum) if post control emissions are  $<$  MST.
4. Describe indicator ranges and performance criteria for a CEMS<sup>2</sup>, COMS<sup>3</sup>, or PEMS<sup>4</sup> [Section 64.3(a)(4)];
5. Describe justification for use of parameters, ranges and monitoring approach [Section 64.4(b)];
6. Provide emissions test data [Section 64.4(c)]; and, if necessary
7. Provide an implementation plan for installing, testing, and operating the monitoring [Section 64.4(d)];

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<sup>1</sup> Major Source Trigger (see District Rule 201.1 for requirements)

<sup>2</sup> Continuous Emission Monitoring System

<sup>3</sup> Continuous Opacity Monitoring System

<sup>4</sup> Predictive Emission Monitoring System

## COMPLIANCE ASSURANCE MONITORING (CAM)

**Form 201.1-L**

If your Title V facility has control devices in use, the CAM rule may apply. Follow instructions below to determine if your facility is subject to CAM requirements.

1. COMPANY/FACILITY NAME: **Lehigh Southwest Cement Company**

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2. TITLE V FACILITY NUMBER: **1147**

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3. **CAM Requirements** (see instructions following page)  
 Emission unit(s) identified below are subject to the CAM rule and a CAM plan is attached for each affected emissions unit.     
  There are no emission units with control devices at this Title V facility that are subject to the CAM rule.

Emissions Unit Permit or Equipment No	Equipment Description <sup>4</sup>	Uncontrolled Emissions		Connected to Control Unit Permit or Equipment No.	Control Equipment Description <sup>4</sup>	Controlled Emissions	
		Pollutant	PTE <sup>5</sup> (tons/year)			Pollutant	PTE <sup>5</sup> (tons/year)
1147009	Bulk & Sack Cement Loadout Operation	PM10	1110	1147009	Fabric Collectors J6-428, J6-429, J3-200, J6-201, J6-202, J7-367, J7-410	PM10	11.10
1147013	Raw Material Storage & Handling Operation	PM10	273	1147013	Fabric Collectors C3-150, C3-190, C4-150, D1-020, D1-025, D2-075	PM10	2.73
1147014	Raw Mill System	PM10	445	1147014	Fabric Collectors S1-010, S2-115, S4-115, S4-145, S4-150, S4-205	PM10	4.45
1147015	Homogenizing & Kiln Feed System	PM10	227	1147015	Fabric collectors F1-185, F1-235	PM10	2.27
1147016	Coal Drying & Pulverizing	PM10	737	1147016	Fabric Collectors G7-125, G7-230, G7-232, G7-238, G7-315, -325, -335, -345, G7-420, G7-505, G7-255, G7-515	PM10	7.37
1147017	Preheater/Precalciner Portland Cement Kiln	PM10	7842	1147017	Baghouse S3-160	PM10	78.42
1147017	Preheater/Precalciner Portland Cement Kiln	NOx	n/a	None	Process Control	NOx	1232.24

## COMPLIANCE ASSURANCE MONITORING (CAM)

**Form 201.1-L**

If your Title V facility has control devices in use, the CAM rule may apply. Follow instructions below to determine if your facility is subject to CAM requirements.

1. COMPANY/FACILITY NAME: Lehigh Southwest Cement Company
2. TITLE V FACILITY NUMBER: 1147
3. **CAM Requirements** (see instructions following page)  
 Emission unit(s) identified below are subject to the CAM rule and a CAM plan is attached for each affected emissions unit.     
  There are no emission units with control devices at this Title V facility that are subject to the CAM rule.

Emissions Unit Permit or Equipment No	Equipment Description <sup>4</sup>	Uncontrolled Emissions		Connected to Control Unit Permit or Equipment No.	Control Equipment Description <sup>4</sup>	Controlled Emissions	
		Pollutant	PTE <sup>5</sup> (tons/year)			Pollutant	PTE <sup>5</sup> (tons/year)
1147017	Preheater/Precalciner Portland Cement Kiln	SOx	n/a	None	Process Control	SOx	1293
1147017	Preheater/Precalciner Portland Cement Kiln	CO	n/a	None	Process Control	CO	3942
1147018	Clinker Cooler	PM10	6084	1147018	Fabric Collector G6-210	PM10	60.84
1147019	Clinker Storage & Reclaim Operation	PM10	131	1147019	Fabric Collectors G4-125, E1-225, E3-130, E1-232	PM10	1.31
1147020	B-3 Finish Mill	PM10	2460	1147020	Fabric Collectors E3-135, E3-345, E3-385	PM10	24.60
1147021	B-4 Finish Mill	PM10	2320	1147021	Fabric Collectors E4-135, E4-420, E4-410, E4-430, E4-403	PM10	23.20
1147022	Cement Storage Silo & Loadout Operation	PM10	372	1147022	Fabric Collectors J1-331, J2-105, J2-115, J2-205, J2-215	PM10	3.72
1147033	Crusher	PM10	4020	1147033	Fabric Collector B2-090, B2-120, B2-160, B2-320	PM10	40.20

## COMPLIANCE ASSURANCE MONITORING (CAM)

### Form 201.1-L

If your Title V facility has control devices in use, the CAM rule may apply. Follow instructions below to determine if your facility is subject to CAM requirements.

1. COMPANY/FACILITY NAME: **Lehigh Southwest Cement Company**
2. TITLE V FACILITY NUMBER: **1147**
3. **CAM Requirements** (see instructions following page)  
 Emission unit(s) identified below are subject to the CAM rule and a CAM plan is attached for each affected emissions unit. |  There are no emission units with control devices at this Title V facility that are subject to the CAM rule.

<sup>1</sup> For more detailed information regarding CAM applicability, refer to 40 CFR Part 64, Section 64.1.

<sup>2</sup> Only one CAM plan is required for a control device that is common to more than one emissions unit, or if an emissions unit is controlled by more than one control device similar in design and operation. If control devices are not similar in design and operation, one plan is required for each control device.

<sup>3</sup> List all new and existing emission units and connected devices by District permit number or equipment number. When an emissions unit is new and does not have a District permit number, leave this column blank.

<sup>4</sup> Provide brief description (equipment type, make, model and serial number) of the emissions units and control devices as appropriate.

<sup>5</sup> Potential to Emit.

### Instructions to Determine CAM Rule Applicability:

With the exception of municipally-owned back-up utility power generating units (described in 40 CFR Part 64, Section 64.2(b) (2)<sup>1</sup>, the CAM rule is applicable to each emissions unit (existing and new construction) at a title V facility that meets ALL the following criteria<sup>2</sup>:

1. The emission unit is subject to an emission limitation or standard<sup>3</sup> (often found in permit conditions);
2. The emission unit uses a control device to achieve compliance with the emission limitation or standard; and
3. The emission unit has a pre-control potential to emit (PTE)<sup>4</sup>, that is equivalent or exceeds any Title V major source thresholds as shown on the following table:

Pollutant	CAM PTE <sup>4</sup> Emission Threshold For Individual Emission Unit at Title V Facility (tons per year)
PM <sub>10</sub>	100
SO <sub>x</sub>	100
NO <sub>x</sub>	100
VOC	100
CO	100
1 HAP <sup>5</sup>	10
2+ HAPs	25

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<sup>1</sup> The facility must attach the documentation required by 40 CFR Part 64, Section 64.2(b) (2) to demonstrate the backup utility power unit only operates during periods of peak demand or emergency situations; and has actual emission, averaged over the last three calendar years of operation less than 50% of the major source emission thresholds.

<sup>2</sup> Additional information about the CAM Rule can be found on U.S. EPA website at <http://www.epa.gov.ttnemc01/cam.html>.

<sup>3</sup> Only emission limitation and standards from an “applicable requirement” fro emission units with control devices are subject to the CAM rule. Applicable requirements are federally-enforceable requirements are rules adopted by the District or the State and are approved by EPA as part of the State Implementation Plan (SIP) {aka “SIP approved Rules”}

For emission units with control devices that are subject to the following federal enforceable requirements, the CAM rule does NOT apply: 1) NSPS (40 CFR Part 60); 2) NESHAP (40 CFR Parts 61 and 63); 3) Title VI of the Federal Clean Air Act (CAA) for Stratospheric Ozone Protection ; 4) Any emission cap that is federally enforceable, quantifiable, and meets the requirements in 40 CFR Part 70, Section 70.4 (b)(12); and 5) Emission limitations or standards a continuous compliance determination method is required.

<sup>4</sup> See District Rule 210.1.IV.E.

<sup>5</sup> Hazardous Air Pollutants.



## COMPLIANCE ASSURANCE MONITORING (CAM) PLAN

### MONITORING PARAMETERS

<b>Emission Unit</b>	<b>Equipment or area monitored</b>	<b>Indicators to be monitored</b>	<b>Indicator range</b>	<b>Frequency</b>	<b>Justification</b>
1147009	Cement Storage Silos and Rail Loadout	Visible emissions	Operation of fabric collector	USEPA Method 22 and Method 9 as specified in 40 CFR Part 63, Subpart LLL	Operation of fabric collectors prevent visible emissions
1147013	Raw Material Storage & Handling Operation	Visible emissions	Operation of fabric collector	USEPA Method 22 and Method 9 as specified in 40 CFR Part 63, Subpart LLL	Operation of fabric collectors prevent visible emissions
1147014	Raw Mill System				
1147015	Homogenizing & Kiln feed System				
1147016	Coal Drying & Pulverizing System				
1147017	Preheater/Precalciner Portland cement Kiln	Visible emissions	Kiln exhaust gas stack opacity range 0 – 20%	COM	COM = Continuous opacity monitor
1147017	Preheater/Precalciner Portland cement Kiln	NOx	Kiln Stack Exhaust	CEM	CEM = Continuous emission monitor
1147017	Preheater/Precalciner Portland cement Kiln	SOx	Kiln Stack Exhaust	CEM	Kiln baghouse is both a process unit and an emissions control unit

<b>Emission Unit</b>	<b>Equipment or area monitored</b>	<b>Indicators to be monitored</b>	<b>Indicator range</b>	<b>Frequency</b>	<b>Justification</b>
1147017	Preheater/Precalciner Portland cement Kiln	CO	Kiln Stack Exhaust	CEM	
1147018	Cooler	Visible emissions	Operation of fabric collector	COM	COM = Continuous opacity monitor
1147019	Clinker Storage & Reclaim	Visible emissions	Operation of fabric collector	USEPA Method 22 and Method 9 as specified in 40 CFR Part 63, Subpart LLL	Operation of fabric collectors prevent visible emissions
1147020	B3 Finish Mill	Visible emissions	Operation of fabric collector		
1147021	B4 Finish Mill	Visible emissions	Operation of fabric collector		
1147022	Cement Storage Silo & Loadout Operation	Visible emissions	Operation of fabric collector		
1147033	Crusher	Visible emissions	Operation of fabric collector		
					Operation of fabric collectors prevent visible emissions
					Operation of fabric collectors prevent visible emissions

## Appendix C

### Greenhouse Gas Facility Wide Reporting

**Greenhouse Gases:**

Carbon dioxide (CO<sub>2</sub>),  
 Nitrous oxide (N<sub>2</sub>O),  
 Methane (CH<sub>4</sub>),  
 Hydrofluorocarbons (HFCs),  
 Perfluorocarbons (PFCs), and  
 Sulfur Hexafluoride (SF<sub>6</sub>).

Reported for the year 2013

<b>GHG EMISSIONS</b> (short tons per year)							
Pollutants:	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	HFCs	PFCs	SF <sub>6</sub>	Total
Emissions (tpy):	630,939.10	25.20	3.61	N/A	N/A	N/A	
*GWP:	1	21	310	**	**	23,900	
CO <sub>2</sub> e (tpy):	630,939.10	529.26	1,120.21	N/A	N/A	N/A	632,588.56

\*Global Warming Potential (GWP): The capacity to heat the atmosphere, calculated as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram (kg) of a substance relative to that of 1 kg of CO<sub>2</sub>. GWP shall be calculated according to the factors for a 100-year time horizon, as stated in 40 CFR Part 98 Subpart A Table A-1 (Global Warming Potentials).

\*\* GWP varies based on each pollutant.