**ROUGH DRAFT**

**EASTERN KERN AIR POLLUTION CONTROL DISTRICT**

# MAJOR SOURCE PERMIT TO OPERATE

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

**Permittee:** California Portland Cement Company

**Location:** 9350 Oak Creek Road
Mojave, California 93501-7738

**Permit No:** 1003-V-2000

**Mailing Address:** 9350 Oak Creek Road
Mojave, California 93501-7738

**Issuance Date:** Month xx, 2025

**Expiration Date:** Month xx, 2030

**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:

Gary Ray, Jr.
Air Pollution Control Officer

# TABLE OF CONTENTS

# TABLE OF CONTENTS

# 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:

| | **Federally Enforceable Conditions** | **Reg/Rule** |
|---|---|---|
| 1. | **Stack Monitoring**<br><br>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. | Reg. I, Rule 108 |
| 2. | **Source Sampling**<br><br>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.<br><br>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 ($PM_{10}$) 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. | Reg. I, Rule 108.1 |
| 3. | **Severability**<br><br>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. | Reg. I, Rule 114 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 4. | **Compliance with Permit Conditions**<br><br>A. Permittee shall comply with all permit conditions;<br><br>B. Permit does not convey any property rights or any exclusive privilege;<br><br>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action ordenial of permit renewal;<br><br>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;<br>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and<br><br>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. | Reg. II, Rule 201.1 |
| 5. | **Record Keeping**<br><br>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:<br><br>1) Date, place, and time of sampling;<br>2) Operating conditions at time of sampling;<br>3) Date, place, and method of analysis; and<br>4) Results of analysis;<br><br>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<br><br>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. | Reg. II, Rule 201.1 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 6. | **Reporting**<br><br>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;<br><br>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;<br><br>C. Semi-annual report shall be submitted no later than November 29 of each year and annual report shall be submitted no later than May 30 of the following year to the APCO;<br><br>D. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;<br><br>E. Progress report shall be made on a compliance schedule at least semi-annually and including:<br><br>1) Date when compliance will be achieved,<br>2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and<br>3) Log of any preventative or corrective action taken; and<br><br>F. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report. | Reg. II, Rule 201.1 |
| 7. | **Referencing of District and Applicable Requirements**<br><br>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:<br><br>A. Plant modernization project; and<br><br>B. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment.<br><br>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. | Reg. II, Rule 201.1 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 8. | **Right of Entry**<br><br>The source shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:<br><br>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;<br><br>B. Inspection and duplication of records required by the permit to operate; and<br><br>C. Source sampling or other monitoring activities. | Reg. II, Rule 201.1 |
| 9. | **Permit Life**<br><br>The life of this permit shall be five years from the date of issuance. | Reg. II, Rule 201.1 Section VI.B.15 |
| 10. | **Administrative Permit Amendment and Minor Permit Modification**<br><br>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1. | Reg. II, Rule 201.1 |
| 11. | **Applicability of Federally Enforceable Conditions**<br><br>Federally Enforceable Conditions **do not apply** 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 **shall apply** to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits except as noted above. | Reg. II, Rule 201.1 |

*The reminder of this page intentionally left blank.*

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 12. | **Periodic Monitoring**<br><br>**Non-Point**<br><br>California Portland 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, California Portland 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.<br><br>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.<br><br>**Point**<br><br>California Portland 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, California Portland Cement Company shall conduct testing on that point source:<br><br>**Point (continued)**<br><br>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;<br><br>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. | Reg. II, Rule 201.1 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 13. | **Additional Monitoring**<br><br>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.<br><br>All control equipment shall be inspected annually for proper operation. California Portland Cement Company shall maintain all records of control equipment maintenance for a period of five years.<br><br>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.<br><br>Record keeping provisions associated with all monitoring requirements shall include the following information:<br><br>A. Identification of stack or emission point being monitored;<br><br>B. Operational conditions at the time of monitoring;<br><br>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<br><br>D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action. | Reg. II, Rule 201.1 |
| 14. | **Testing**<br><br>California Portland 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 #SE78-73 and District Rule 210.1) | Reg. II, Rule 201.1 |

| | **Federally Enforceable Conditions** | **Reg/Rule** |
|---|---|---|
| 15. | **<u>Conditional Approval</u>**<br><br>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. | Reg. II, Rule 209 |

| | | |
|---|---|---|
| 16. | **Standards for Authority to Construct**<br>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:<br><br>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);<br>2) The change is not subject to any requirements under Title IV of the Clean Air Act;<br>3) The change is not a Title I modification; and<br>4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit. Specifically, the change does not result in the exceedance of the emissions allowable under this permit (whether expressed as an emissions rate or in terms of total emissions.<br>B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA in advance of the proposed changes which shall be a minimum of 7 days, unless the permitting authority provides in its regulations a different time-frame for emergencies. Notification is not required for a changes exempt from permitting in accordance with 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. Permitee shall attach a copy of the Authority to Construct Permit and any subsequent Permit to Operate, which evidences the Off-Permit Change to this Title V permit.<br><br>C. Uponsatisfying the requirements of paragraph B above, the Permittee may make the proposed change;<br><br>D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;<br><br>E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and<br><br>F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section. | Reg. II, Rule 210.1 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 17. | **Prevention of Significant Deterioration (PSD)**<br><br>Facility may be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modifications(s). | Reg. II, Rule 210.4 |
| 18. | **Permit Fees**<br><br>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.<br><br>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.<br><br>**Payment of Supplemental Fee**<br><br>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. | Reg. III, Rule 301<br><br>Rule 201.1 Section VIII.B. |
| 19. | **Greenhouse Gas Fee**<br><br>Any stationary source that has actual GHG emissions, in the prior calendar year, greater than or equal to 100,000 tons of CO2e, as calculated in accordance with 40 CFR Part 98, shall pay a Consumer Price Index (CPI) adjusted GHG fee per ton of CO2e being emitted. Sources subject to this Rule shall submit an annual report of GHG emissions to the District no later than the thirty-first day of March. | Reg. III, Rule 301.4 |
| 20. | **Visible Emissions**<br>**Limits**<br><br>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:<br><br>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<br><br>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. | Reg. IV, Rule 401 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 21. | **Particulate Matter Concentration - Desert Basin**<br><br>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.<br><br>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. | Reg. IV, Rule 404.1 |
| 22. | **Particulate Matter - Emission Rate**<br><br>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. | Reg. IV, Rule 405 |
| 23. | **Process Weight - Portland Cement Kilns**<br><br>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. | Reg. IV, Rule 406 |
| 24. | **Sulfur Compounds**<br><br>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 ($SO_2$). | Reg. IV, Rule 407 |
| 25. | **Fuel Burning Equipment - Combustion Contaminants**<br><br>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.<br>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 (CO2) at standard conditions. | Reg. IV, Rule 409 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 26. | **Storage of Organic Liquids**<br><br>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 | Reg. IV, Rule 411 |
| 27. | **Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants**<br><br>No person shall transfer or permit the transfer of gasoline from any delivery vessel into any stationary storage container subject to requirements of this rule unless such container, except those used for aviation gasoline, is equipped with an CARB certified permanent submerged fill pipe and utilizes an CARB certified Phase I vapor recovery system that is maintained and operated according to manufacturer specifications and the applicable CARB Executive Order. | Reg. IV, Rule 412 |
| 28. | **Monitoring, Testing, Record Keeping Requirements** (Applies to EU 020) (Gasoline Storage - Phase I)<br><br>1. The Reid Vapor Pressure of gasoline shall be determined in accordance with ASTM D 5191-01.<br><br>2. Measurements of leak concentrations, excepting delivery vessels, shall be conducted according to EPA Method 21 using an appropriate portable hydrocarbon detection instrument calibrated with methane.<br><br>a. The instrument shall be calibrated in accordance with the procedures specified in EPA Method 21 or the manufacturer's instruction, as appropriate, not more than 30 days prior to its use.<br>b. The operator shall record the calibration date of the instrument.<br><br>3. Measurements of leak concentrations for delivery vessels shall be conducted according to the CARB Test Procedure for Determination of Leaks, TP-204.3.<br><br>4. Static Torque of Rotatable Phase I Adaptors: CARB Test Procedure TP 201.1B.<br><br>5. Leak Rate of Drop Tube/Drain Valve Assembly: CARB Test Procedure TP 201.1C.<br><br>6. Leak Rate of Drop Tube Overfill Protection Devices and Spill Container Drain Valves: CARB Test Procedure TP 201.1D.<br><br>7. Static Leak Test for Aboveground Tanks: CARB Test Procedure TP-206.3 or CARB Test Procedure TP-201.3B as applicable. | Reg. IV, Rule 412 |

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 29. | **Monitoring, Testing, Record Keeping Requirements** (Applies to EU 020) (Gasoline Storage & Dispensing - Phase II)<br><br>1. Operators shall comply with the CARB certified Phase II vapor recovery system performance tests specified in Sections V.C.1.a through V.C.1.D of this Rule and shall conduct all applicable performance tests at start up and thereafter (no more than 30 days before or after the required compliance testing date) as required by the applicable CARB Executive Order and installation and operation days.<br><br>a. Conduct and pass a Static Leak Test of the CARB certified Phase II vapor recovery system at least once every twelve months.<br><br>b. Conduct and pass a Dynamic Back-Pressure Test of the CARB certified Phase II vapor recovery system at least once every twelve months. Aboveground storage tanks that have integral dispensers (non-remote) are exempt from this requirement unless otherwise required under the applicable CARB Executive Order.<br><br>c. For CARB certified Phase II vapor recovery systems with bellowsless nozzles, conduct and pass, as applicable, an Air-to-Liquid Volume Ratio Test or a Vapor-to-Liquid Ratio Test at least once every twelve months.<br><br>d. Those vapor recovery systems whose CARB Executive Orders specify different tests to be performed instead of, or in addition to, the referenced test methods, or which, by their design, preclude the use of the referenced test methods, shall be tested in accordance with the test procedures specified in the applicable CARB Executive Orders or their equivalents as approved by the APCO and EPA. | Reg. IV, Rule 412.1 |
| 30. | **Transfer of Gasoline into Vehicle Fuel Tanks**<br><br>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order. | Reg. IV, Rule 412.1 |
| 31. | **Federal New Source Performance Standards (NSPS)**<br><br>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.<br><br>All applicable requirements of 40 CFR Part 60, Subparts A, F, Y, OOO and IIII apply to this facility. | Reg. IV, Rule 422 |

| | **Federally Enforceable Conditions** | Reg/Rule |
|---|---|---|
| 32. | **National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)**<br><br>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.<br><br>All applicable requirements of 40 CFR Part 61, Subpart M and 40 CFR Part 63, Subparts A, LLL, and ZZZZ apply to this facility.<br><br>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.<br><br>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. | Reg. IV, Rule 423 |
| 33. | **Monitoring, Testing, Record Keeping Requirements** (Applies to EU 026) (Portland Cement Kilns - Oxides of Nitrogen)<br><br>Continuous $NO_X$ 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.<br><br>Oxides of nitrogen stack testing for purposes of this requirement shall be conducted using EPA Test Method 7E.<br><br>Stack gas flow rate testing for purposes of this requirement shall be conducted using EPA Test Method 2.<br><br>The following formula shall be used to convert uncorrected observed $NO_X$ concentration in ppm to tons per day at standard conditions of $68^o$ F and a gas pressure of 29.92 inches of mercury:<br><br>$$\frac{Tons \cdot NOx}{day} = (ppmv \cdot NOx) \times \left(\frac{46 grams}{mole}\right) \times (1.56 \times 10^{-7}) \left(\frac{dscf}{\min}\right) \times (0.0120)$$ | Reg IV, Rule 425.3 |

*Reminder of this page intentionally left blank.*

| | **Federally Enforceable Conditions** | |
|---|---|---|
| 34. | **Compliance Certification**<br><br>The owner/operator shall comply with the following procedures for compliance certification:<br><br>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;<br><br>B. Compliance certification period shall begin April 1 of each year and end March 31 of the following year;<br><br>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;<br><br>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<br><br>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.<br><br>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.<br>ry, the statements and information in the document are true, accurate, and complete.<br><br>U.S. EPA's Mailing Address:<br>Director, Air Division<br>75 Hawthorne Street<br>AIR-3<br>San Francisco, CA 94105 | 40 CFR 70.5d |

*Remainder of this page intentionally left blank.*

| | **Federally Enforceable Conditions** | |
|---|---|---|
| 35. | **Monitoring, Record keeping Requirements** (Applies to EU 062)<br>(Coating of Metallic Parts and Motor Vehicle/Mobile Equipment Refinishing)<br><br>1. A current list of VOC containing products in use containing all data necessary to evaluate compliance, including the following information, as applicable:<br>a. Material name and manufacturer's identification;<br>b. Application method;<br>c. Material type (coating as listed in Table of Standards) and specific use instructions;<br>d. Specific mixing instructions;<br>e. VOC actual and VOC regulatory for coatings, as applied, or VOC content for solvent.<br><br>2. Daily coating and solvent use records, including the following information for each:<br>a. Volume of each coating/solvent mix ratio;<br>b. VOC content in grams/liter (or pounds/gallon) as applied/used;<br>c. Volume of each coating/solvent in liters (or gallons) applied/used;<br>d. Type and amount of solvent used for cleanup and surface preparation.<br><br>If purchase records are used to determine the amount of solvents used, then records and manifests of the amounts of solvents disposed of or sent to a recycler must also be maintained and made available to the APCO upon request.<br><br>3. Current manufacturer specification sheets, material safety data sheets, technical data sheets, or air quality data sheets, which list the VOC actual for coatings and VOC regulatory for coatings of each ready-to-spray coating (based on the manufacturer's stated mix ratio), and VOC content of each solvent.<br><br>4. Purchase records identifying the coating type (as listed in Table of Standards), name, and volume of coatings and solvents.<br><br>5. Alternate Emissions Control Records: Any person using an emission control system shall maintain daily records of key system operating parameters which will demonstrate continuous operation and compliance of the emission control system during periods of VOC emission producing activities. "Key system operating parameters" are those parameters necessary to ensure or document compliance with Section VI.C., including, but not limited to, temperatures, pressure drops, and air flow rates. | Reg IV, Rule 410.4 & 410.4A |

*Remainder of this page intentionally left blank.*

| | Federally Enforceable Conditions | Reg/Rule |
|---|---|---|
| 36. | **Clean Air Act**<br><br>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. | CAA Section 112(r)(7) |
| 37. | **National Emission Standard for Asbestos**<br><br>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. | 40 CFR 61, Subpart M |
| 38. | **Protection of Stratospheric Ozone**<br><br>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.<br>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.<br><br>Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161. | 40 CFR Part 82 |

*Remainder of this page intentionally left blank.*

| | District Only Rules | Reg/Rule |
|---|---|---|
| 1. | **Inspections**<br>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. | Reg. I, Rule 107 |
| 2. | **Nuisance**<br>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. | Reg. IV, Rule 419 |

*Remainder of this page intentionally left blank.*

# 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

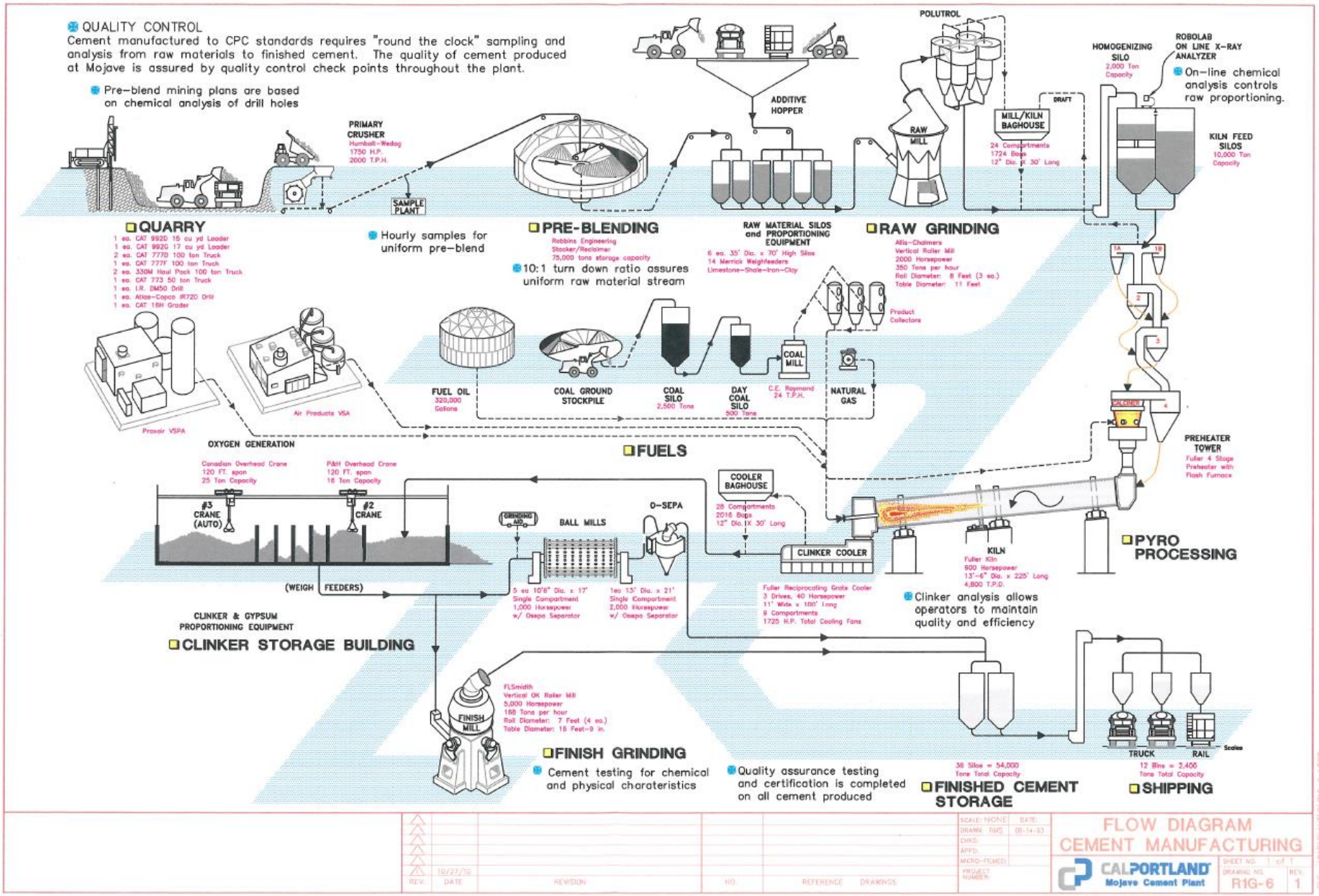
Spectro Photometer

Above Ground Fuel Oil Storage Tanks

Above Ground Diesel Storage Tanks

Small Degreasing Operations

QC Lab Air Cleaning Devices




**Process Diagram**

Emission Unit 001 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **001** | **Primary Crusher Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Primary Crusher Operation, including following equipment:

A. Partially enclosed raw ore receiving hopper (B2-HOP1) equipped with dust suppressant spray system (30 hp pump, B2-WP1) and tank (B2-WT1);
B. Apron feed (B2-PF1);
C. Scalping vibrating grizzly (B2-VG1) with dust control ventilation by fabric collector (B2-DC1);
D. Impact crusher (B2-IC1) with dust collection by fabric collector (B2-DC1) and dust suppression by treated water sprays from spray system (B1-DS1), + 10 hp pump;
E. Belt conveyor (B2-BC1) with dust collection by fabric collector (B2-DC1) and dust suppression by treated water sprays from spray system (B1-DS1);
F. Primary crushing fabric collector (B2-DC1) with 522 - 4.75 in. dia by 10 ft. long polyester filter tubes, pulse-jet cleaning mechanism and 100 hp exhaust fan;
G. Dust suppressant system (B1-DS1) using treated water sprays or lime slurry with 10 hp pump and two lime slurry storage tanks;
H. Two line slurry tanks with two 15 hp pumps, shared alternately with dust suppressant system (B1-DS1);
I. Four compartment surge bin with dust control ventilation by fabric collector (B2-DC2);
J. Top silo fabric dust collector (B2-DC2) with 96-4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 15 hp exhaust fan;
K. Four vibrating feeders (B3-VF1, VF2, VF3, VF4) with dust collection by fabric collectors (B3-DC1, C3-DC1) and dust suppression by spray system (B1-DS1);
L. Belt conveyor (B3-BC1) with dust collection by fabric collectors (B3-DC1, C3-DC1) and dust suppression by spray system (B1-DS1);
M. Bottom silo, fabric dust collector (B3-DC1) with 144-4.75 in dia. by 10 ft. long filter tubes, pulse jet cleaning mechanism and 40 hp exhaust fan;
N. Two diverter gates (B3-DG1,2);
O. Stacking conveyor belt (B5-BC1) with dust control ventilation by fabric collector (B3-DC2);
P. Fabric dust collector (B3-DC2) with 234-4.75" dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 40 hp exhaust fan; and
Q. Radial stacker conveyor, (B5-TS1), inside limestone storage building) with dust control ventilation by fabric collector (C2-DC1). (EU 022)

**OPERATIONAL CONDITIONS:**

1. Quarry drilling equipment shall be equipped with water injection or fabric collectors. (Rule 210.1)
2. Quarry shall be equipped with dust suppressant spray system or utilize water spray truck at all fugitive dust sources. (Rule 210.1)

3. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart OOO)
4. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
5. Water sprays shall be operational and shall be located as described in equipment description. (Rule 210.1 BACT Requirement)
6. Lime slurry obtained from off-site sources shall be used only as wetting agent to prevent fugitive dust emissions from sources described in Equipment Description, and in quantity not to exceed average daily rate of 25 tons per day on monthly basis. Slurry shall originate from softening municipal water only without prior District approval. (Rule 209 and per application)
7. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector B2-DC1 in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR Part 64)
8. Compliance with all operational conditions shall be verified by appropriate record keeping, including, hours of operations and corresponding process rates. Such records shall be kept on site in readily available format. (Rule 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

Should visible emissions indicate non-compliance with dust collector emission limits, compliance with hourly and concentration emission limits for particulates 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:**

| | | |
|---|---|---|
| All Fabric Collectors: | 0.015 | grains/scf (of PM) (Rule 404.1) |
| Fabric Collector B2-DC1: | 3.99 | lb/hr (of $PM_{10}$) |
| Subject to CAM | 95.66 | lb/day (of $PM_{10}$) |
| Fabric Collector B2-DC2: | 0.64 | lb/hr (of $PM_{10}$) |
| | 15.43 | lb/day (of $PM_{10}$) |
| Fabric Collector B3-DC1: | 1.16 | lb/hr (of $PM_{10}$) |
| | 27.77 | lb/day (of $PM_{10}$) |
| Fabric Collector B3-DC2: | 1.80 | lb/hr (of $PM_{10}$) |
| | 43.20 | lb/day (of $PM_{10}$) |

(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 004 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **004** | **D-3 Finish Mill** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. Thirty-two proportioning silos;
B. Thirty- six cement storage silos served by four Norblo size 156A fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with finish mills 1-6, PTO's 1003017D and 1003055-059D;
C. Conveying equipment from clinker & gypsum storage including the following:
   1. Six Feed-O-Weight bins (D3-TFOW-1B, D3-TFOW-4, D3-TFOW-5, D3-TFOW-6, D3-TFOW-7, D3-1-WF3A and transfer points exiting to belt conveyor (D3-BC1).
   2. Donaldson Torit Model CPV-4 fabric collector (D3-TFOW5-DC1) equipped with pulse jet cleaning mechanism and 5-hp exhaust fan rated at 1,000 CFM.
   3. Donaldson Torit Model CPV-8 fabric collector (D3-TFOW2-DC1) equipped with pulse jet cleaning mechanism and 7.5-hp exhaust fan rated at 2,000 CFM.
   4. DCE-vokes Modd Model DLM-V/30/10H, fabric collector (D3-TFOW6-DC1) equipped with pulse jet cleaning mechanism, 7.5-hp exhaust fan rated at 1,800 CFM, and shared with finish mills 1-5, PTO's 1003017D and 1003055-058.
   5. One Norblo Model 234-A fabric collector (D3-FC-1) with 6000 cfm volumetric flow rate.
   6. One Norblo model 234-a, (newly converted to pulse jet cleaning mechanism) fabric collector (D3-1-DC2) with 1433 sq.ft. filter area and 6000 cfm volumetric flow rate.
D. Three finish grinding mills (O-SEPA mills) (D3-1-M1, D3-1-M2, and D3-1-M3);
E. Three Fabric Filter Model 240-10 "B" bottom removal fabric collectors (D3-1-M1-DC1, D3-1-M2-DC1, and D3-1-M3-DC1) each with 3688 sq. ft. filter area, 16,500 cfm, with reverse jet cleaning mechanism each serving O-SEPA Mills D3-1-M1, 'M2, and M3 (respectively);
F. Fuller 13 Zone #128 Plenum Pulse fabric collector (D3-1-DC1) with 1664 filter bags, with 350 hp fan, 72,000 cfm @ 19 in w.c., serving item O-SEPA separator;
G. Two finish grinding mills (O-SEPA mills) (D3-1-M4, and D3-1-M5); and
H. Two Micro-Pulsaire Model 320S-8-20 fabric collectors (D3-M4-DC1, D3-M5-DC1) each with 3,100 sq. ft. filter area, 12,000 cfm, with reverse pulse-jet cleaning mechanism each serving O-SEPA Mills D3-1-M4, and D3-1-M5.

**OPERATIONAL CONDITIONS**:

1. Each 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 locations of uniform flow. (Rule 108.1)
2. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
3. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)

4. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
5. Visible emissions from all emission points shall not exhibit or exceed 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
6. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
7. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
8. Visible emissions from fabric collector shall not exceed 5% opacity. (Rule 210.1)
9. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
10. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
11. Mill maximum process weight rates shall not exceed 150 tons/hour. (Rule 210.1)
12. Facility shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
13. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
14. 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)
15. 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 limitation or concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request and official results shall be submitted within 30 days after test completion. (Rule 108.1)

**EMISSION LIMITS**:

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector (D3-TFOW5-DC1): | 0.01 | gr/scf |
| (@ 1,000 acfm) | 0.09 | lb/hr |
| | 2.06 | lb/day |
| | 0.35 | tons/yr |

Emission Unit 004 Permit Conditions

| | | |
|---|---|---|
| Fabric Collector (D3-TFOW2-DC1): | 0.01 | gr/scf |
| (@ 2,000 acfm) | 0.17 | lb/hr |
| | 4.11 | lb/day |
| | 0.69 | tons/yr |
| Fabric Collector (D3-TFOW6-DC1): | 0.01 | gr/scf |
| (@ 2,000 acfm) | 0.15 | lb/hr |
| | 3.70 | lb/day |
| | 0.62 | tons/yr |
| Fabric Collector (D3-DC2): | 0.01 | gr/scf |
| (@ 4,850 acfm) | 0.42 | lb/hr |
| | 9.98 | lb/day |
| | 1.68 | tons/yr |
| Fabric Collector (D3-DC3): | 0.01 | gr/scf |
| (@ 4,850 acfm) | 0.42 | lb/hr |
| | 9.98 | lb/day |
| | 1.68 | tons/yr |
| Fabric Collector (D3-DC4): | 0.01 | gr/scf |
| (@ 4,850 acfm) | 0.42 | lb/hr |
| | 9.98 | lb/day |
| | 1.68 | tons/yr |
| Fabric Collector (D3-DC5): | 0.01 | gr/scf |
| (@ 4,850 acfm) | 0.42 | lb/hr |
| | 9.98 | lb/day |
| | 1.68 | tons/yr |
| Fabric Collector (D3-FC-1): | 0.075 | gr/scf |
| (@ 6,000 acfm) | 3.86 | lb/hr |
| | 92.57 | lb/day |
| | 15.57 | tons/yr |
| Fabric Collector (D3-1-DC2)- converted: | 0.010 | gr/scf |
| (@ 6,000 acfm) | 0.51 | lb/hr |
| | 12.34 | lb/day |
| | 2.08 | tons/yr |
| Fabric Collector (D3-1-M1-DC1): | 0.008 | gr/scf |
| (@ 10,429 acfm) | 0.72 | lb/hr |
| | 17.16 | lb/day |
| | 2.89 | tons/yr |

Emission Unit 004 Permit Conditions

| | | |
|---|---|---|
| Fabric Collector (D3-1-M2-DC1): | 0.008 | gr/scf |
| (@ 10,429 acfm) | 0.72 | lb/hr |
| | 17.16 | lb/day |
| | 2.89 | tons/yr |
| Fabric Collector (D3-1-M3-DC1): | 0.008 | gr/scf |
| (@ 10,429 acfm) | 0.72 | lb/hr |
| | 17.16 | lb/day |
| | 2.89 | tons/yr |
| Fabric Collector (D3-1-DC1): | 0.008 | gr/scf |
| (@ 57,300 acfm) | 3.93 | lb/hr |
| | 94.30 | lb/day |
| | 15.86 | tons/yr |
| Fabric Collector (D3-M4-DC1): | 0.010 | gr/scf |
| (@ 12,000 acfm) | 1.03 | lb/hr |
| | 24.69 | lb/day |
| | 4.15 | tons/yr |
| Fabric Collector (D3-M5-DC1): | 0.010 | gr/scf |
| (@ 12,000 acfm) | 1.03 | lb/hr |
| | 24.69 | lb/day |
| | 4.15 | 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 209 and 210.1)

Emission Unit 010 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **010** | **Coal Supply System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Coal Supply System, including following equipment:

A. Two rail car receiving hoppers with undergrate and vibrating feeder sprays;
B. Two vibrating feeders;
C. Seven material transfer conveyors;
D. Concrete storage silo with bin vent filter;
E. Coke truck receiving (no dust control provisions);
F. Rotary crusher with dust collector; and
G. Pre-heater/pre-calciner coal mill system including the following:
    1. Roller mill with motors totaling 200-hp;
    2. Dynamic separator with 40-hp motor;
    3. Dense phase pressure pot;
    4. Surge bin;
    5. Pneumatic conveying system including compressor with 220-hp motor;
    6. Fabric collector (H7-6-CM2-DC1) with 125-hp exhaust fan; and
    7. Receiver fabric collector.

**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 any single source shall be no more than 0.1-gr/scf. (Rule 404.1)
4. Sufficient moisture shall be applied to prevent coal and/or petroleum coke from exhibiting visible emissions. (Rule 210.1)
5. Visible emissions from coal supply system shall not exceed 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Subpart Y, Rule 423, 40 CFR Part 63 Subpart LLL)
6. Particulate matter emissions from roller mill fabric collector (H7-6-CM2-DC1) and receiver fabric collector exhaust shall not exceed 0.005-gr/scf. (Rule 210.1 BACT Requirement)
7. Fabric collector (H7-6-CM2-DC1) and receiver fabric collector shall have no visible emissions. (Rule 210.1 BACT Requirement)
8. Fabric collector (H7-6-CM2-DC1) volumetric exhaust flow rate shall not exceed 15,000 standard cubic feet per minute (scfm). (Rule 210.1
9. Receiver fabric collector volumetric exhaust flow rate shall not exceed 600 standard cubic feet per minute (scfm). (Rule 210.1)
10. Fabric dust collector and shall be in operation when associated equipment is operated. (Rule 210.1)
11. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
12. All conveyors transporting dried material shall be covered, leak-tight, and have no visible emissions. (Rule 210.1)

13. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
14. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
15. 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)
16. 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 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 ($PM_{10}$):**

| | | |
|---|---|---|
| Coal Unloading and Storage | 0.10 | lb/hr |
| | 2.32 | lb/day |
| | 0.42 | ton/year |
| Fabric Collector | 0.005 | gr/scf (Rule 210.1 BACT Requirement) |
| | 0.64 | lb/hr |
| | 15.43 | lb/day |
| | 2.82 | ton/year |
| Receiver Fabric Collector | 0.005 | gr/scf (Rule 210.1 BACT Requirement) |
| | 0.03 | lb/hr |
| | 0.62 | lb/day |
| | 0.11 | 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. (Rules 201.1, 209 and 210.1)

Emission Unit 016 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **016** | **Clinker & Additive Storage Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. Clinker storage building with clinker and additive bins;
B. Clinker discharge ladder chute with dust control ventilation by dust collector (H2-6-DC4) with 121 - 5 in. dia. by 8 ft. long filter tubes and reverse pulse jet cleaning mechanism;
C. Two overhead cranes;
D. Additives unloading hopper;
E. Conveyors with covers served by fabric collector (D3-DC9-A) and fabric collector (D3-DC9); and
F. Movable tripper for transferring additives into storage building.

**OPERATIONAL CONDITIONS:**

1. 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)
2. Dust collectors shall be equipped with operational pressure differential indicators. (Rule 210.1)
3. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
4. Visible emissions from clinker and additive storage operation shall not exceed 10% opacity during normal operation. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
5. Clinker storage pile(s) constructed for outside storage separate from clinker storage building shall be covered with tarp or similar material at end of active addition to or removal of clinker from pile(s). (Rule 210.1 BACT Requirement)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1)
7. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector H2-6-DC4 in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR Part 64)
8. 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)
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)

Emission Unit 016 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| From H2-6-DC4: | 0.01 | grains/scf |
| Subject to CAM | 1.03 | lb/hr |
| | 24.69 | lb/day |
| | 4.51 | ton/yr |
| Clinker Handling: | 2.59 | lb/hr |
| | 62.03 | lb/day |
| | 11.32 | ton/yr |
| Clinker Storage Fugitive Emissions: | 0.02 | lb/hr |
| | 0.55 | lb/day |
| | 0.10 | 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)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **017** | **Finish Grinding Operation #1** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #1, including following equipment:

A. Conveying equipment from clinker and gypsum Feed-O-Weight bins and transfer points to existing belt (D3-BC1) with four DCE-vokes Modd Model DLM-V/20/10H, pulse jet cleaning mechanism, insertable collectors ( FOW-1-DC and FOW-2-DC1) shared with finish mills 1-5, PTO's 1003017D and 1003055-058 and (FOW-3-DC1 and FOW-6-DC1) shared with finish mills 1-5, PTO's 1003017D and 1003055-058 and OSEPA finish mills 1-3, PTO's 1003004A, each with 5 hp Chicago fan Model SQ 1-11LS;
B. Finish mill D3-F1 with Fabric Filter Air Systems Inc. Model 240-10 fabric collector (FM-1-DC1) with 240 - 5.875 in. dia. by 10 ft. long polyester filter tubes, reverse pulse jet cleaning mechanism and 75 hp exhaust fan;
C. Two separator assemblies;
D. Conveying equipment with Pitter 600D fabric collector (D3-F-DC2);
E. Conveying equipment with one Norblo size 234A fabric collector (D3-DC1) shared with finish mills 1-5, PTO's 1003017D and 1003055-058;
F. 36 cement storage silos with 18 interstices and four Norblo size 156A fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with PTO's 1003017D and 1003055-059; and
G. Conveyors with two Norblo size 156A fabric collectors (D3-DC6 and D3-DC7) shared between finish mills 1-6, PTO's 1003017D and 1003055-059.

**OPERATIONAL CONDITIONS:**

1. Maximum process weight shall not exceed 25 tons per hour. (Rule 210.1)
2. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
3. Conveyor covers and elevator hoods shall be maintained. (Rule 209)
4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
5. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
6. Fabric collectors shall operate whenever associated equipment is operating. (Rule 209)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| From FM-1-DC1: | 0.02 | gr/scf |
| | 3.43 | lb/hr |
| | 82.29 | lb/day |
| All Other Source Operations: | 0.2 | gr/scf (PM) (Rule 404.1) |

(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 018 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **018** | **Packhouse & Loading Facilities** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Packhouse & Loading Facilities, including following equipment:

A. Twelve cement feed bins;
B. Two rotary screens with two fabric collectors, PHI-DC-1 and PHI-DC-2;
C. Four air slides with four fabric collectors, PHI-DC-3, PHI-DC-4, PHI-DC-5, PHI-DC-6;
D. Conveyors;
E. Three loading hoods with three fabric collectors, PH-I-N1-DC-1 (will be removed and replaced with item L and M), PH-I-N2-DC-1, and PH-I-N3-DC-1;
F. Two truck vacuum cleaners (one spare);
G. Fabric collector (PH-I-DC-7);
H. Three screw conveyors (PH-S1, PH-S23, and PH-S-11) ventilated to both existing fabric collector (item I) and additional fabric collector (item G);
I. Fabric collector (PH-E6-DC);
J. Fabric collector (PH-E6-DC);
K. Fabric collector (PH1-DC-2A);
L. East Loadout Station fabric collector and fan (DCL CFM-470) (PH-N1-SP2, 5 hp);
M. West Loadout Station fabric collector and fan (DCL CFM-470) (PH-N1-SP1, 5hp);
N. East horizontal spout with self-sealing discharge;
O. West horizontal spout with self-sealing discharge;
P. Four manually operated rotary throttles for maintenance; and
Q. Four air operated rotary throttles for product shut-off.

**OPERATIONAL CONDITIONS:**

1. Particulate matter emissions from new East and West Loadout Station fabric collectors shall not exceed 0.0075 grains per standard cubic feet for continuous operation. (Rule 210.1)
2. Fabric collectors shall be equipped with operational manometers. (Rule 210.1)
3. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
4. Particulate matter emissions from any single source operation shall be no more than 0.075 gr/scf. (Rule 210.1)
5. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Truck vacuuming equipment shall be maintained. (Rule 210.1)
7. Conveyors shall be equipped with covers, screen covers, and elevator hoods. (Rule 210.1)
8. Covers, screen covers, and elevator hoods shall be maintained without holes. (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. (Rule 108.1)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| East Load-out Station: | 0.09 | lb/hr |
| Fabric Collector PH-N1-Sp2 | 2.16 | lb/day |
| | 0.39 | ton/yr |
| West Load-out Station: | 0.12 | lb/hr |
| Fabric Collector PH-N1-SP1 | 2.78 | lb/day |
| | 0.51 | ton/yr |
| Fabric Collector PHI-DC-1: | 2.14 | lb/hr |
| | 51.43 | lb/day |
| | 8.02 | ton/yr |
| Fabric Collector PHI-DC-2: | 2.14 | lb/hr |
| | 51.43 | lb/day |
| | 8.02 | ton/yr |
| Fabric Collector PHI-DC-3: | 1.07 | lb/hr |
| | 25.71 | lb/day |
| | 4.01 | ton/yr |
| Fabric Collector PHI-DC-4: | 1.07 | lb/hr |
| | 25.71 | lb/day |
| | 4.01 | ton/yr |
| Fabric Collector PHI-DC-5: | 1.07 | lb/hr |
| | 25.71 | lb/day |
| | 4.01 | ton/yr |

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector PHI-DC-6: | 1.07 | lb/hr |
| | 25.71 | lb/day |
| | 4.01 | ton/yr |
| Fabric Collector PH-I-N2-DC-1: | 2.14 | lb/hr |
| | 51.43 | lb/day |
| | 8.02 | ton/yr |
| Fabric Collector PH-I-N3-DC-1: | 2.14 | lb/hr |
| | 51.43 | lb/day |
| | 8.02 | ton/yr |
| Fabric Collector PH-I-DC-7: | 2.14 | lb/hr |
| | 51.43 | lb/day |
| | 8.02 | ton/yr |
| Fabric Collector PH-E6-DC: | 9.86 | lb/hr |
| | 236.57 | lb/day |
| | 36.91 | ton/yr |
| Fabric Collector PH-E6-DC-1: | 4.97 | lb/hr |
| | 119.31 | lb/day |
| | 18.61 | ton/yr |
| Fabric Collector PH-I-DC-2A: | 5.66 | lb/hr |
| | 135.77 | lb/day |
| | 21.18 | 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)

**SPECIAL CONDITIONS:**

aa) Owner/operator shall remove fabric collector PH1-N1-DC1 from service prior to operation of new fabric collectors, DCL CFM-470. (Rule 210.1)

bb) No emission reduction shall be obtained for the shutdown and removal of fabric collector PH1-N1-DC1. (Rules 201.3 and 210.1)

Emission Unit 020 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **020** | **Aboveground Gasoline Storage & Dispensing System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. 5,000 gallon regular unleaded aboveground gasoline storage tank with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filing (Phase I).
B. Phase I (filling of storage tank) vapor collection system including the following components:
   1. Spill Container
   2. Liquid Fill Adapter
   3. Liquid Fill Cap
   4. Vapor Adapter
   5. Vapor Cap
   6. Drop Tube
   7. Pressure/Vacuum Vent Valve
C. Vapor-assist type Phase II (fueling of vehicle tank) vapor collection system including the following CARB certified components:
   1. Nozzle
   2. Swivel
   3. Flow Limiter
   4. Vapor Check Valve
   5. Coaxial Hose
   6. Breakaway Coupling
   7. Dispenser

**OPERATIONAL CONDITIONS:**

1. Storage/dispensing facility shall be equipped with California Air Resources Board "certified" Phase I (filling of storage tanks) and Phase II (fueling of vehicle) gasoline vapor control systems. (Rules 412 and 412.1)
2. Gasoline storage tanks shall be equipped with two-point Phase I vapor control system. (Rule 412)
3. Tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 412)
4. Gasoline usage for gasoline storage tanks shall not exceed 72,000 gallons per year without prior District approval. (Rule 210.1)
5. 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 412 and 412.1)

6. All Phase I (filling of storage tank) vapor collection equipment shall be used when tanks are filled. (Rule 412)
7. Phase II (filling of vehicle tank) vapor collection equipment shall be maintained according to manufacturer's recommendations and used when vehicles tanks are filled. (Rule 412)
8. Retail stations shall post following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 412.1)
9. Tanks shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
10. The Phase II Vapor Recovery System shall be installed, started up, maintained and repaired only by person(s) certified by the system manufacturer(s) to perform such work. A copy of such person's certification shall be kept in the facility's repair log. (Rule 412.1)
11. The vapor recovery systems and their components shall be operated and maintained in accordance with the State certification requirements. (Rules 412 and 412.1)
12. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
13. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
14. The permittee shall perform the required maintenance as specified in ARB-Approved Installation and Maintenance Manual for the Phase I Vapor Recovery System. (Rule 412)
15. Rotatable vapor recovery adaptors shall be capable of at least 360-degree rotation and have an average static torque not to exceed 108 pound inch in accordance with Static Torque of Rotatable phase 1 Adaptors TP-201.1B. (Rule 412)
16. The operator shall implement a periodic maintenance inspection program for the certified Phase II vapor recovery system in accordance with ARB approved Installation, Operation and Maintenance Manual for Phase II EVR. The program shall be documented in an operation and maintenance (O&M) manual and shall at a minimum contain the following information:
    a. All applicable ARB Executive Orders, Approval Letters, and District Permits;
    b. The manufacturer's specifications and instructions for installation, operation, repair, and maintenance required pursuant to ARB Certification Procedure CP-201, and any additional instruction provided by the manufacturer;
    c. System and/or component testing requirements, including test schedules and passing criteria for each of the standard tests. The owner/operator may include any non-ARB required diagnostic and other tests as part of the testing requirements;
    d. Protocol for performing periodic maintenance inspections including the components to be inspected and the defects requiring repair; and
    e. Additional O&M instructions, if any, that are designed to ensure compliance with the applicable rules, regulations, ARB Executive Orders, and District permit conditions, including replacement schedules for failure or wear prone components. (Rule 412.1)
17. The operator shall conduct periodic maintenance inspections based on the amount of gasoline dispensed by the facility in a calendar month as follows:
    a. Less than 25,000 gallons per month - one day per week; and
    b. Greater than or equal to 25,000 gallons per month - five days per week.
18. All inspections shall be documented within the O&M manual. (Rule 412.1)
19. The operator shall maintain monthly gasoline throughput records. (Rule 412.1)

20. All records required by this permit shall be retained on-site for a period of at least five years, and shall be made available for inspection upon request. (Rule 412.1)
21. 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 re-inspected system or has authorized its use pending re-inspection. All such defects shall be tagged "out of service" upon detection. (Rules 412 and 412.1)
22. The operator shall maintain on the premises a log of any repairs made to the certified Phase I or Phase II vapor recovery system. The repair log shall include the following:
    a. Date and time of each repair;
    b. Name of the person(s) who performed the repair, and if applicable, the name, address and phone number of the person's employer;
    c. Description of service performed;
    d. Each component that was repaired, serviced, or removed;
    e. Each component that was installed as replacement, if applicable; and
    f. Receipts or other documents for parts used in the repair and, if applicable, work orders which shall include the name and signature of the person responsible for performing the repairs. (Rule 412.1)
23. The District shall be notified by the permittee 30 days prior to each test. The test results shall be submitted to the District no later than 30 days after each test. (District Rule 108.1)
24. The District shall be notified within 24 hours of the facility's pass/fail status after the performance of each test. (District Rule 108.1)
25. 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)

**SPECIAL CONDITIONS**:

aa. Vapor-return and/or vapor control systems used to comply with requirements of this Permit to Operate shall comply with all safety, fire, weights and measures, and other applicable codes and/or regulations. (Rule 412)
bb. Equipment shall be installed and tested in accordance with attached CARB Executive Orders VR-402-B and VR-301-E. (Rule 412.1)
cc. System and components shall be of California Air Resources Board Certified design, any component changes shall be approved in advance by District. (Rule 412)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **021** | **Sampling System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Sampling System, including following equipment:

A. Primary sampler (B4-SX1);
B. Sample feed belt conveyor (B4-BC1) with dust control ventilation by fabric collectors (B4-DC1 and B3-DC2);
C. Surge bin (B4-B1) with dust control ventilation by fabric collector (B4-DC1);
D. Vibrating feeder (B4-VF1) with dust control ventilation by fabric collector (B4-DC1);
E. Hammer mill (B4-IC1) with dust control ventilation by fabric collector (B4-DC1);
F. Cam belt conveyor (B4-BC3) with dust control ventilation by fabric collector (B4-DC1);
G. Belt feeder (B4-BF1) with dust control ventilation by fabric collector (B4-DC1);
H. Secondary sampler (B4-SX2);
I. Manual diverter gate (B4-DG2) with chute exiting to three-sided bunker and water sprays at exit;
J. Sample system fabric dust collector (B4-DC1) with 216 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 40 hp exhaust fan;
K. Rotary splitter (B4-RF1);
L. Vibrating mill (B4-PL1) with dust control ventilation by fabric collector (B4-DC2);
M. Belt feeder (B4-BF2) with dust control ventilation by fabric collector (B4-DC2);
N. Vibrating mill fabric dust collector (B4-DC2) with 16 - 4.5 in. dia. by 6 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 3 hp exhaust fan;
O. Tertiary sampler (B4-SX3);
P. Sample return cam belt (B4-BC4) with dust control ventilation by fabric collectors (B4-DC2 and C3-DC1) shared with PTO 1003023B; and
Q. Diverter gate (B4-DG1).

**OPERATIONAL CONDITIONS:**

1. No more than 16 tons per hour shall be diverted to chute. (Rule 210.1)
2. Moisture content of material entering diverter chute shall not be less than 2.80% by weight. (Rule 210.1)
3. Water spray nozzles shall be periodically cleaned and maintained to ensure proper spray pattern. (Rule 210.1)
4. There shall be no visible emissions from diverter chute or chute exit to bunker. (Rule 210.1)
5. If material is stored in bunker, material shall be completely covered. (Rules 210.1)
6. Diverted material shall be used only as road covering material. (Rule 210.1)
7. Water sprays shall be positioned at diverter chute exit to minimize visible emissions. (Rule 210.1)
8. Bunker shall be three-sided shall extend at least 6 inches above material in bunker to prevent wind erosion. (Rule 210.1)
9. Sampling system operation shall not exceed 2,100 hours per year. (Rule 210.1)

Emission Unit 021 Permit Conditions

**EMISSION LIMITS:**

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

| | | |
|---|---|---|
| Fabric Collector B4-DC1: | 0.015 | gr/scf |
| | 1.67 | lb/hr |
| | 40.08 | lb/day |
| | 1.75 | ton/yr |
| Fabric Collector B4-DC2: | 0.015 | gr/scf |
| | 0.06 | lb/hr |
| | 1.44 | lb/day |
| | 0.06 | ton/yr |
| Fabric Collector C3-DC1: | 0.015 | gr/scf |
| (Shared with EUs 001 and 003): | 1.67 | lb/hr |
| | 40.08 | lb/day |
| | 1.75 | 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)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **022** | **Limestone Storage & Reclaim System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Limestone Storage & Reclaim System, including following equipment:

A. Blend rock storage pile enclosed by dust control ventilated structure;
B. Storage pile structure fabric dust collector (C2-DC1) with 252 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 60 hp exhaust fan;
C. Storage pile reclaim hopper (C2-HOP1);
D. Storage pile reclaim vibrating feeder (C2-VF1) with dust control ventilation by fabric collector (C2-DC2A);
E. Tunnel reclaim fabric dust collector (C2-DC2A) with 55 - 4.5 in. dia. by 6 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 15 hp exhaust fan shared by fabric collector (C2-DC2B);
F. Traveling radial reclaimer (C2-RC1);
G. Limestone reclaim belt conveyor (C2-BC1) with dust control ventilation by fabric collectors (C2-DC2A and DC2B);
H. Emergency manual reclaim hopper (C2-HOP2);
I. Manual reclaim vibrating feeder (C2-VF2) with dust control ventilation by fabric collector (C2-DC2B);
J. Manual reclaim fabric dust collector (C2-DC2B) with 55 - 4.5 in. dia. by 6 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 15 hp exhaust fan shared by fabric collector (C2-DC2A);
K. Diverter gate (C2-DG1) to ball mill storage or additive emergency storage system;
L. Roller mill storage feed belt conveyor (C2-BC2) with dust control ventilation by fabric collectors (C2-DC3 and C2-DC4);
M. Reclaim fabric dust collector (C2-DC3) with 64 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 15 hp exhaust fan;
N. Diverter gate (C2-DG2) to roller mill storage silo and roller mill feed belt conveyor;
O. Roller mill storage feed belt conveyor (C2-BC3) with dust control ventilation by fabric collector (C2-DC4); and
P. Roller mill silo fabric dust collector (C2-DC4) with 128 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 25 hp exhaust fan.

**DESIGN CONDITIONS:**

a. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
b. Each 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 locations of uniform flow. (Rule 108.1)

Cal Portland Cement Version 2025

Emission Unit 022 Permit Conditions

**OPERATIONAL CONDITIONS**:

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR 60 Subpart F)
2. Material removed from fabric dust collectors shall be returned to product stream. (Rule 210.1)
3. Fabric dust collectors shall have operational differential pressure indicators. (Rule 210.1)
4. Emergency manual reclaim hopper shall be operated only if an adequate water spray system is made available as necessary. (Rule 210.1)
5. This system shall not have fugitive particulate sources. (Rule 210.1)
6. Fabric collectors (except for C2-DC1) serving limestone storage and reclaim system shall not be operated more than 8,760 hours per year. (Rule 210.1)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector C2-DC1: | 0.015 | gr/scf |
| | 3.86 | lb/hr |
| | 92.64 | lb/day |
| | 16.91 | ton/yr |
| Fabric Collectors C2-DC2A and C2-DC2B (combined): | 0.015 | gr/scf |
| | 0.52 | lb/hr |
| | 12.48 | lb/day |
| | 1.88 | ton/yr |
| Fabric Collector C2-DC3: | 0.015 | gr/scf |
| | 0.51 | lb/hr |
| | 12.24 | lb/day |
| | 1.84 | ton/yr |
| Fabric Collector C2-DC4: | 0.005 | gr/scf |
| | 0.38 | lb/hr |
| | 9.15 | lb/day |
| | 1.67 | 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 023 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **023** | **Additive System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Additive System, including following equipment:

A. Additives receiving hopper (C4-HOP1) with partially enclosed truck and rail car dump station with water spray dust suppressant system;
B. Under hopper belt feeder (C4-BF1) equipped with treated water spray dust suppressant system (B1-DS1);
C. Take-away belt conveyor (C4-BC1) with dust control ventilation by fabric collectors (C4-DC1, C4-DC2), and dust suppression by treated water spray system (B1-DS1);
D. Water dust suppression spray system connected to spray system (B1-DS1) of primary crusher area;
E. Additives unloading fabric dust collector (C4-DC1) with 96 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 20 hp exhaust fan;
F. Additives unloading fabric dust collector (C4-DC2) with 16 - 4.5 in. dia. by 8 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 3 hp exhaust fan;
G. Diverter gate (C4-DG1) to emergency storage or roller mill storage silos;
H. Roller mill storage silos belt conveyor (C3-BC1) with dust control ventilation by fabric collectors (C3-DC1 and C3-DC2);
I. Conveying transfer fabric dust collector (C3-DC1) with 216 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 40 hp exhaust fan;
J. Turn head (C3-THD1) serving 6 roller mill storage silos (C3-S1 through C3-S6);
K. Diverter gate (C3-DG1) to interstice silica storage silos east and west (C3-S5 and S6);
L. Silo transport conveyor belt (C3-BC2) with dust control ventilation by fabric collector (C3-DC2);
M. Silo fabric dust collector (C3-DC2) with 252 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 40 hp exhaust fan;
N. Emergency stacker (B5-ST2) with dust control ventilation at loading by fabric collector (B5-DC1); and
O. Emergency fabric dust collector (B5-DC1) with 49-4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 7.5 hp exhaust fan.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
2. Material removed from fabric dust collectors shall be returned to product stream. (Rule 210.1)
3. Fabric dust collectors shall have operational differential pressure indicators. (Rule 210.1)
4. Emergency stacker (B5-ST2) shall be operated only if an adequate water spray system is made available as necessary. (Rule 210.1)
5. This system shall not have fugitive particulate sources. (Rule 210.1)
6. Operation of additives system shall not exceed 3,692 hours per year. (Rule 210.1)

Emission Unit 023 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector C4-DC1: | 0.015 | gr/scf |
| | 0.77 | lb/hr |
| | 18.48 | lb/day |
| | 1.42 | ton/yr |
| Fabric Collector C4-DC2: | 0.015 | gr/scf |
| | 0.08 | lb/hr |
| | 1.92 | lb/day |
| | 0.15 | ton/yr |
| Fabric Collector C3-DC1: | 0.015 | gr/scf |
| (shared with EUs 001 and 021) | 1.67 | lb/hr |
| | 40.08 | lb/day |
| | 3.08 | ton/yr |
| Silo Fabric Collector C3-DC2: | 0.015 | gr/scf |
| | 2.06 | lb/hr |
| | 49.44 | lb/day |
| | 3.80 | ton/yr |
| Emergency Fabric Collector B5-DC1: | 0.015 | gr/scf |
| | 0.32 | lb/hr |
| | 7.68 | lb/day |
| | 0.59 | 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 024 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **024** | **Roller Mill System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. Eight storage silos: two blend rock (C2-S1 and S2) and six proportioning silos (C3-S1, S2, S3, S4, S5, and S6) containing the following raw and processed materials:
   1. Raw materials - earthen materials rich in oxides of calcium, alumina, iron, silica; and
   2. Processed materials - gold mine tailings, mill scale, and fluid catalytic cracking operation catalyst fines, or copper slag material recycled after use as sandblast agent.

B. Four vibrating feeders (D2-6-VF1, VF2, VF3, and VF4) with dust control ventilation by fabric collector (D2-6-DC1);

C. Four vibrating feeders (C5-VF1 thru VF4) with dust control ventilation by fabric collector (C5-DC1A);

D. Seven material reclaim weight feeders (D2-6-WF1 - WF7) and screw conveyors (D2-6-SC1 - SC7), one for each silo except north blend rock silo, with dust control ventilation at loading by fabric collectors (D2-6-DC1A, DC1B, and DC1C);

E. Seven material reclaim weigh feeders and screw conveyors (C5-WF1 thru WF7) for: north blend rock, high alumina shale, shale, iron, magnesite, interstice silica west, interstice silica east, all with dust control ventilation fabric collectors (C5-DC1A, DC1B, and DC1C);

F. Raw mill feed belt conveyor (D2-6-BC1) with dust control ventilation at loading by fabric collectors (D2-6-DC1A, DC1B, DC1C, and DC2);

G. Material reclaim conveyor belt (C5-BC1) with control ventilation by fabric collectors (C5-DC1A, DC1B, and DC1C);

H. Three reclaim fabric dust collectors (D2-6-DC1A, DC1B, and DC1C) each with 32 - 4.5 in. dia. by 62 in. long cartridge filter tubes, pulse jet cleaning mechanism, and one 25 hp exhaust fan serving all three dust collectors;

I. Three reclaim fabric dust collectors (C5-DC1A, DC1B, and DC1C), each with 32 - 4.5 in. dia. by 62 in. long cartridge filter tubes, pulse jet cleaning mechanism, and one 25 hp exhaust fan serving all three dust collectors;

J. Transfer point fabric dust collector (D2-6-DC2) with 64 - 4.75 in. dia. by 10 ft. long Rynoflex filter tubes, pulse jet cleaning mechanism, and one 7.5 hp exhaust fan;

K. Reclaim transport conveyor belt (C5-BC1) with control ventilation by fabric collector (D2-7-DC1);

L. Fabric dust collector (D2-7-DC1) with pulse jet cleaning mechanism and exhaust fan;

M. Two transport conveyor belts with control ventilation by dust collectors (D2-7-DC1, D2-7-DC2, and D2-7-DC3);

N. Two diverter gates (D2-7-DG1 and D2-7-DG2) for feed into raw mill reject recirculation system or raw mill system;

O. Two storage bins: one reject and one proportioning bin containing raw materials;

P. Raw mill (D2-7-RM) swept by hot preheater exhaust gas;

Q. Five fabric dust collectors (D2-7-DC1, D2-7-DC2, D2-7-DC3, D2-7-DC4, and D2-7-DC5), each with pulse jet cleaning mechanism and individual exhaust fan;
R. Two production cyclones with dust control ventilation by kiln dust collector (H5-6-DC1);
S. Four air slides with four blowers and bucket elevator with dust control ventilation by dust collector (D2-7-DC5);
T. Four rotary feeders with dust control ventilation by fabric collectors (D2-7-DC2 and D2-7-DC5);
U. Four air slides (D2-7-AS1, D2-7-AS2, D2-7-AS3 and D2-7-AS5) with five blowers (D2-7-AS1-BL1, D2-7-AS2-BL1, D2-7-AS2-BL2 with blowers, D2-7-AS3-BL1, and D2-7-AS5-BL1) and dust control ventilation at loading by fabric collectors (D2-7-DC5 and D2-6-DC3);
V. Airslide fabric dust collector (D2-6-DC3) each with 96 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 20 hp exhaust fan;
W. Sampling bucket elevator (D2-6-BE1), sampling port box and dust control ventilation by homogenizing fabric collector (H4-6-DC1);
X. Sampling air slide (D2-6-AS5) with dust control ventilation by homogenizing fabric collector (H4-6-DC1);
Y. Air slide (D2-6-AS4) with blower (F3-6-BL4) and dust control ventilation by homogenizing fabric collector (H4-6-DC1); and
Z. Raw Mill Reject Recirculation System, including the following:
    1. Conveyor belt feeder to a diverter gate with control ventilation by dust collector (D2-7-DC3);
    2. Fugitive dump point from diverter gate; and
    3. Conveyor belt feeder from diverter gate with control ventilation by dust collector (D2-7-DC3).

**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. Each 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 locations of uniform flow. (Rule 108.1)
4. Visible emissions from fabric collectors shall not exceed 5% opacity. (Rule 210.1 BACT Requirement)
5. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
6. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
7. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
8. Other than the rejects recirculation system, there shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
9. All ventilation ducts shall be equipped with pitot ports and shall be of "self-cleaning" configuration or shall be designed to maintain minimum transport velocity of 400 fpm. (Rule 210.1)
10. Each fabric collector of pulse jet cleaning type shall be equipped with differential pressure indicator and each fabric collector of reverse air cleaning type shall be equipped with differential pressure indicator on each compartment. (Rule 210.1)
11. Each pulse jet fabric collector cleaning mechanism shall be provided with dry air supply of adequate volume and pressure. (Rule 210.1)
12. Collected fines shall be returned to product stream. (Rule 210.1)
13. Visible emissions from any single emission point shall be less than 10% opacity (Ringelmann ½).

(Rule 422, 40 CFR Part 60 Subpart F)

14. Operation of raw mill system shall not exceed 8760 hours per year. (Rule 210.1)
15. Process weight rate for raw mill shall not exceed 3,000,000 tons per year without prior District approval. (Rule 210.1)
16. Process weight rate for fugitive drop point at recirculating rejects systems shall not exceed 7,300 tons per year without prior District approval. (Rule 210.1)
17. Facility shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
18. Records of processing throughput shall be maintained and made available upon request for inspection. (Rule 210.1)
19. 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:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector D2-6-DC1A, DC1B, and DC1C | 0.005 | gr/scf |
| | 0.33 | lb/hr |
| | 7.92 | lb/day |
| | 1.45 | tons/yr |
| Fabric Collector C5-DC1A, DC1B, and DC1C | 0.005 | gr/scf |
| | 0.33 | lb/hr |
| | 7.92 | lb/day |
| | 1.45 | tons/yr |
| Fabric Collector D2-6-DC2 | 0.005 | gr/scf |
| | 0.15 | lb/hr |
| | 3.70 | lb/day |
| | 0.68 | tons/yr |
| Fabric Collector D2-6-DC3 | 0.005 | gr/scf |
| | 0.24 | lb/hr |
| | 5.76 | lb/day |
| | 1.05 | tons/yr |

Emission Unit 024 Permit Conditions

| | | |
|---|---|---|
| Fabric Collector D2-7-DC1 | 0.005 | gr/scf |
| | 0.65 | lb/hr |
| | 15.51 | lb/day |
| | 2.83 | tons/yr |
| Fabric Collector D2-7-DC2 | 0.005 | gr/scf |
| | 0.43 | lb/hr |
| | 10.24 | lb/day |
| | 1.87 | tons/yr |
| Fabric Collector D2-7-DC3 | 0.005 | gr/scf |
| | 0.43 | lb/hr |
| | 10.29 | lb/day |
| | 1.88 | tons/yr |
| Fabric Collector D2-7-DC4 | 0.005 | gr/scf |
| | 0.43 | lb/hr |
| | 10.29 | lb/day |
| | 1.88 | tons/yr |
| Fabric Collector D2-7-DC5 | 0.005 | gr/scf |
| | 0.39 | lb/hr |
| | 9.36 | lb/day |
| | 1.71 | tons/yr |
| Rejects System (Fugitive) | 0.49 | lb/hr |
| | 11.80 | lb/day |
| | 0.09 | 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)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **025** | **Homogenizing & Kiln Feed System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. 2,000 ton homogenizing silo (F2-6-HS) and two compressors (F2-6-FC1 and FC2) with dust control ventilation by fabric collector (H4-6-DC1);
B. Two storage silos, 3,300 ton and 6,700 ton capacity, (F3-6-KS1 and KS2) and two blowers (F3-6-BL1 and BL2) with dust control ventilation by fabric collector (H4-6-DC1);
C. Four airslides (F3-6-AS1, AS2, AS3, and AS6) and two blowers (F3-6-BL3 and BL4) with dust control ventilation by fabric collector (F3-6-DC1);
D. Airslide fabric dust collector (F3-6-DC1) with 96 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 15 hp exhaust fan;
E. Take-away bucket elevator (F3-6-BE1) with dust control ventilation by fabric collector (F3-6-DC1);
F. Three airslides (F3-6-AS4, AS5, and AS7) served by blower (H4-6-BL1) with dust control ventilation by fabric collector (H4-6-DC1);
G. Level box (H4-6-LB1) with weigh feeder (H4-6-WF1), load cells, and blower (H4-6-BL2);
H. Two level box overflow airslide (H4-6-AS1 and AS7) served by blower (H4-6-BL1);
I. Level box overflow impact scale (H4-6-IS2);
J. Level box loadout airslide (H4-6-AS2) served by blower (H4-6-BL3) with modulating valve (H4-6-MV1) and dust control ventilation by fabric collector (H4-6-DC1);
K. Impact scale (H4-6-IS1);
L. Two loadout airslides (H4-6-AS3 and AS4) served by blower (H4-6-BL3) with dust control ventilation by fabric collectors (H4-6-DC1 and DC2);
M. Loadout bucket elevator (H4-6-BE1) with dust control ventilation by fabric collector (H4-6-DC2);
N. Loadout airslide (H4-6-AS6) and blower (H4-6-BL5), with dust control ventilation by fabric collector (H4-6-DC2) (to pyro-processing preheater stage one);
O. Loadout fabric dust collector (H4-6-DC2) with 128 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 25 hp exhaust fan;
P. Loadout level box alternate airslide (H4-6-AS5) served by blower (H4-6-BL3), with dust control ventilation by fabric collector (H4-6-DC1);
Q. Loadout airslide alternate main flow pump, (H4-6-FP1) hopper, and compressor (H4-6-FC1), with dust control ventilation by fabric collector (H4-6-DC3) (to pyro-processing preheater stage one);
R. Alternate flow recirculation pump, (F3-6-FP1) hopper and compressor (F3-6-FC1), with dust control ventilation by fabric collector (F3-6-DC3) (flow from airslide F3-6-AS3 and roller mill airslide D2-6-AS4);
S. Recirculation alleviator (F3-6-CC1) with dust control ventilation by fabric collector (H4-6-DC1);
T. Fabric dust collector (H4-6-DC1) with 450 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 75 hp exhaust fan; and
U. Homogenizing silo airslide (F2-6-AS1) served by blower (F2-6-BL1).

Emission Unit 025 Permit Conditions

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
2. Material removed from fabric dust collectors shall be returned to product stream. (Rule 210.1)
3. Fabric dust collectors shall have operational differential pressure indicators. (Rule 210.1)
4. This system shall not have fugitive particulate sources. (Rule 210.1)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

Fabric Collector F3-6-DC1: Emissions Listed on EU 1003026
(Shared with EUs 1003024 and 026)

Fabric Collector H4-6-DC2: Emissions Listed on EU 1003026
(Shared with EUs 1003024 and 026)

Fabric Collector H4-6-DC1: Emissions Listed on EU 1003026
(Shared with EUs 1003024 and 026)

(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)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **026** | **Pyroprocessing System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Pyroprocessing System, including following equipment:

A. Oxygen injection system including: Vacuum Swing Absorption (VSA) plant, cryogenic storage tanks, vaporizers, pressure temperature control manifold with associated piping valves, regulators, trim heater and injection nozzles;
B. Scrap tire shipping trailer parking/storage area;
C. Scrap tire receiving conveyor;
D. Scrap tire elevator;
E. Scrap tire weigh bridge and conveyor;
F. Scrap tire sliding air lock gate valve followed by two air lock flap gates;
G. Two first stage preheating cyclones (H4-CC1A and CC1B) exhausting to heat exchanger (H4-6-HE1);
H. Second stage preheater cyclone (H4-6-CC2);
I. Third stage preheater cyclone (H4-6-CC3);
J. Fourth stage preheater cyclone (H4-6-CC4);
K. Gas conditioning tower with water injection;
L. Preheater section exhaust fan and roller mill sweep fan (H4-6-KF1) with 3,000 hp motor;
M. Preheater/precalciner combination burner assembly with coal and/or petroleum coke pipe, natural gas nozzle and fuel oil nozzle;
N. Preheater bypass/beneficiation quench air chamber and blower (H6-6-BL1);
O. Bleed air damper (H6-6-D1) with one drop out box (H6-6-B1) and two screw conveyors (H6-6-SC1 and H6-6-DC1-SC1) ventilated by fabric collector (H6-6-DC1);
P. Beneficiation fabric dust collector (H6-6-DC1) with 432 - 12 in. dia. by 20.83 ft. long fiberglass twill filter tubes, reverse air cleaning mechanism, 300 hp exhaust fan and 50 hp reverse air fan;
Q. Three beneficiation loadout screw conveyors (H6-6-DC1-SC1, SC2, and SC3) ventilated by fabric collector (H6-6-DC2);
R. Beneficiation bucket elevator (H6-6-BE1) ventilated by fabric collector (H6-6-DC2);
S. Beneficiation surge bin (H6-6-B2) ventilated by fabric collector (H6-6-DC2);
T. Beneficiation truck loadout screw conveyor (H6-6-SC4) ventilated by fabric collector (H6-6-DC2);
U. Beneficiation Fuller-Kenyon pneumatic transfer system (H6-6-FP1) and 100 hp compressor ventilated by fabric collector (H6-6-DC2);
V. Beneficiation loadout fabric dust collector (H6-6-DC2) with 64 - 4.75 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 15 hp exhaust fan;
W. Beneficiation system alleviator (H6-6-CC1) going to existing surge bin ventilated by fabric collector (H6-6-DC3);
X. Beneficiation surge bin fabric dust collector (H6-6-DC3) with 25 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 7.5 hp exhaust fan;

Y. Fuller Company rotary kiln #6 with variable, multiple fuel burner assembly with retractable burner pipes for coal and/or petroleum coke, and nozzles for natural gas and fuel oil;
Z. Coal and/or petroleum coke transfer belt conveyors (R3-BC7 and BC8) (from existing storage) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
AA. Coal and/or petroleum coke storage silo (R3-CSS2) with dust control achieved by maintaining adequate moisture content (supplied by existing coal and/or petroleum coke handling system PTO 1003010C);
BB. Coal and/or petroleum coke mill weigh feeder (H7-6-WF1) ventilated by fabric collector (H7-6-DC1);
CC. Inerting bin (H7-6-CC1) with two dampers (H7-6-D1 and H7-6-D2);
DD. Coal and/or petroleum coke mill (H7-6-CM1), natural gas-fired air heater (H7-6-AH1), and blower (H7-6-BL1) ventilated to fabric collector (H7-6-DC1);
EE. Coal and/or petroleum coke mill hot air (from clinker cooler) cleaning cyclone (H7-6-CC1) with two dampers (H7-6-D1 and D2);
FF. Coal and/or petroleum coke mill hot air alternate flow damper (H7-6-D4) and blower (H7-6-BL2) into kiln #6;
GG. Coal and/or petroleum coke mill fabric dust collector (H7-6-DC1) with 633 - 4.5 in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism and 300 hp exhaust fan;
HH. Coal and/or petroleum coke mill mini-bins (H7-6-B1, B2, and B3) ventilated by fabric collector (H7-6-DC1);
II. Two parallel coal and/or petroleum coke airlines (H7-6-AS1 and AS2), blower, and impact scales (H7-6-IS1 and IS2) ventilated by fabric collector (H7-6-DC1);
JJ. Two parallel coal and/or petroleum coke diverter gates (H7-6-DG1 and DG2);
KK. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP1) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to precalciner burners);
LL. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP3) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1) (to coal burner H3-6-KBC01 at kiln #6);
MM. Fuller-Kenyon coal and/or petroleum coke pump (H7-6-FP2) and 150 hp blower with dust control ventilation by fabric collector (H7-6-DC1);
NN. Two precalciner hot air (from clinker cooler) dust settling chambers and one damper (H4-6-D1);
OO. One dust settling conveyor belt (H4-6-DCR1) ventilated by fabric collector (H2-6-DC1);
PP. Kiln gas fabric dust collector (H5-6-DC1) (gas from roller mill) with 3,168 – 6.5 in. dia. by 24 ft. long teflon/PTFE filter tubes and 1,750 hp exhaust fan;
QQ. Three kiln gas section screw conveyors (H5-6-DC1-SC2, SC4 and H5-6-SC1);
RR. Kiln gas section bucket elevator (H5-6-BE1) ventilated by fabric collector (D2-6-DC2) (roller mill system);
SS. Two kiln gas section airlines (H5-6-AS1 and AS2) and blower (H5-6-BL1) ventilated by fabric collector (D2-6-DC3) (roller mill system);
TT. Ammonia injection system, reagent for selective non-catalytic reduction system (SNCR), including: 20,000-gallon ammonia storage tank, ammonia pump (H4-6-APS-P1), distribution piping to injection ports at calciner and injection control system;
UU. Hydrated lime injection system, including: 10,000-cu.ft. storage bin, 2400-cfm bin vent filter (H4-6-LIS-DC1) with 10-hp exhaust fan, vibrating bin discharger (H4-6-LIS-BA), weigh bin, rotary feeder, blower with 40-hp motor (H4-6-LIS-BL1) feeding line to kiln feed/stage 2 outlet;
VV. Lime slurry injection system, including hopper with dual pant leg, slurry tank, rotary feeder, slurry pump with 15-hp motor, and screw conveyor with 3-hp motor; and

Emission Unit 026 Permit Conditions

WW. Fabric Collector CKD with 3,500-cfm exhaust flow rate.

**OPERATIONAL CONDITIONS**:

1. Gas conditioning tower with water injection shall be equipped with operational water flow meters to assure operation of water injection system. (Rule 210.1)
2. Fabric collector serving hydrated lime storage silo 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. Ammonia injection system shall be equipped with ammonia metering system determining rate of ammonia injection. (Rule 210.1)
5. Oxygen injection system including VSA plant shall be constructed and maintained in accordance with manufacturer's specifications. (Rule 210.1)
6. Visible emissions from fabric collector CKD shall not exceed 5% opacity or Ringelmann ¼ for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
7. Visible emissions from kiln shall not exceed 20% opacity. Visible emissions from all other sources shall not exceed 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
8. Material removed from fabric dust collectors and other collected fines shall be returned to product stream (except beneficiation system alkali fines) or otherwise disposed of using method preventing entrainment in atmosphere. (Rule 210.1)
9. Alkali dust from beneficiation system shall be mixed into slurry before discharging to pond. (Rule 210.1)
10. Each fabric collector shall have operational differential pressure indicator(s). (Rule 210.1)
11. Sufficient moisture shall be applied to coal supply system (PTO 1003010C) to prevent dust emissions when handling, storing, and transferring. (Rule 210.1)
12. Kiln shall be fired with the following approved fuels: coal, petroleum coke, natural gas, fuel oil, whole tires, and pre- chipped tires. Biomass fuels and paper cardboard are also allowed alternate fuels if they are not derived from a municipal solid waste source. No other combustible products shall be added to kiln system without prior written permission of the Control Officer. (Rule 210.1)
13. Tires shall not exceed 3.6% by weight of total pyro processing system fuel without prior District approval and toxics testing. (Rule 210.1 and per application and EIR)
14. Tires to be used as fuel shall not be open-stored or stockpiled, and, unless otherwise prohibited by local Fire Marshall, tires stored in delivery trailers shall not exceed seven days inventory without prior approval of Control Officer. (Rule 210.1)
15. No air contaminant shall be released into atmosphere which causes public nuisance or public health hazard. (Rule 419 and CH&SC, Sec 41700)
16. 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)
17. Kiln shall be operated using tire-derived fuel only when all pyro processing system control equipment is operated pursuant to manufacturer's recommendations resulting in particulate emissions not exceeding 0.015-gr/scf and 0.30-lb/ton of kiln feed. (Rules 210.1 and 422, 40 CFR 60 Subpart F)
18. Kiln exhaust NOx (as $NO_2$) emission rate not to exceed 2.5-lb NOx (as $NO_2$) per ton of clinker produced, based on a 30-day rolling average. (Rules 210.1)
19. Kiln exhaust $SO_2$ emission rate not to exceed 1.7-lb $SO_2$ per ton of clinker produced, based on a 90-day rolling average. (Rules 210.1)
20. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
21. Hydrated lime shall be pneumatically loaded into storage bins. (Rule 210.1)

22. California Portland 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) fuels sulfur balance showing compliance with 2.0% limit, e) clinker production rates, and f) results of all source tests and calibrations checks.
23. District 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)
24. H5-6-DC1 exhaust stack shall be equipped with continuous monitors/recorders for nitrogen oxides, non-methane hydrocarbons, and a particulate matter continuous parametric monitoring system (CPMS); and precalciner combustion chamber shall be equipped with continuous monitors/recorders for oxygen and carbon monoxide. Non-methane hydrocarbons and oxygen and carbon monoxide shall be monitored only when using tires as fuel. (Rule 210.1)
25. H5-6-DC1 exhaust stack shall be equipped with continuous monitors/recorders for oxides of sulfur as sulfur dioxide (SOx as $SO_2$), carbon monoxide (CO), and ammonia ($NH_3$). (Rule 210.1)
26. Kiln exhaust CO emission rate not to exceed 3.0-lb CO per ton of clinker produced, based on a 90-day rolling average. (Rule 210.1)

**SPECIAL CONDITIONS:**

aa. Compliance with 10-ppmv ammonia slip limit shall be demonstrated through measuring the actual ammonia injection flow rate from the SNCR system over a 1-hour time period and comparing the flow rate to a maximum ammonia injection flow rate from the SNCR system; the maximum ammonia injection flow rate will be determined in accordance with the District approved standard operating procedure/compliance. CalPortland shall perform this test on a quarterly basis, and while the roller mill is operating; results of test shall be submitted to the District within 60 days of completion, and kept for a period of five years. The ammonia CEMS is not the main continuous compliance mechanism for the ammonia slip limit. (Rules 108.1, 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:**

Annual testing for compliance with volatile organic compound, particulate, oxides of sulfur (as $SO_2$) and oxides of nitrogen (as $NO_2$) emission limits shall be demonstrated by District-witnessed sample collection by certified testing laboratory pursuant to Rule 108.1.

Source test shall utilize hourly emissions limits on this permit to determine compliance.

For the purpose of determining compliance with an applicable standard or numerical limitation, the arithmetic mean of three test runs shall apply, unless two of the three results are above the applicable limit. If two of three runs are above an applicable limit the test cannot be used to demonstrate compliance with an applicable limit.

Emission Unit 026 Permit Conditions

If this permit utilizes an hourly rolling average or daily emission limits to determine normal compliance, only the hourly emission limit (rolling average shall not be utilized) or 1/24$^{th}$ of daily emission limits shall be utilized to determine compliance for the required annual source test.

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

**Particulate Matter ($PM_{10}$):**

| | | | |
|---|---|---|---|
| Beneficiation Collector H6-6-DC1 | 5.79 | lb/hr | |
| Loadout Collector H6-6-DC2 | 0.51 | lb/hr | |
| Surge Bin Collector H6-6-DC3 | 0.15 | lb/hr | |
| Coal Mill Collector H7-6-DC1 | 3.86 | lb/hr | |
| Kiln #6 Collector H5-6-DC1 | 31.89 | lb/hr | |
| Fabric Collector D2-6-DC1 | 0.99 | lb/hr | |
| Fabric Collector D2-6-DC2 | 0.31 | lb/hr | |
| Fabric Collector D2-6-DC3 | 0.71 | lb/hr | |
| Fabric Collector H4-6-DC1 | 3.41 | lb/hr | |
| Fabric Collector H4-6-DC2 | 0.90 | lb/hr | |
| Fabric Collector F3-6-DC1 | 0.58 | lb/hr | |
| Fabric Collector (Lime Storage) | 0.21 | lb/hr | |
| Fabric Collector (CKD) | 0.15 | lb/hr | |
| PM10 Emission Totals: | 49.46 | lb/hr | |
| | 1,186.94 | lb/day | |
| | 215.72 | ton/yr | |
| Oxides of Sulfur (as SO2): | 14,784.00 | lb/day | |
| | 2,698.08 | ton/yr | |
| Oxides of Nitrogen (as NO2): | 20,520.00 | lb/day | |
| | 3,744.90 | ton/yr | |
| Volatile Organic Compounds (VOC): | 18.35 | lb/hr | |
| (as defined in Rule 210.1) | 440.40 | lb/day | |
| | 80.37 | ton/yr | |
| Carbon Monoxide: | 2,553.00 | lb/hr | (8-hr average) (Rule 210.4) |
| | 61,272.00 | lb/day | |
| | 2,277.00 | ton/yr | |
| Ammonia Slip: | 10.0 | ppmv | dry @ 7% O2 (24-hr rolling avg.) |
| | 171.17 | lb/day | |
| | 62,475.67 | lb/yr | |

Emission Unit 026 Permit Conditions

NESHAP Limit (Rule 423, 40 CFR Part 63 Subpart LLL § 63.1343)

| | | |
|---|---|---|
| **Dioxin/Furans (D/F):** | | |
| From Kiln Fabric Collector | 0.2* | ng /dscm TEQ @ 7% $O_2$ (3-hour average § 63.1350) |
| | 0.40 | ng /dscm TEQ @ 7% $O_2$ (if avg. inlet temp. to first PM control device ≤ 400 $^oF$) (3-hour average § 63.1350) |
| **Mercury:** | | |
| From Kiln Fabric Collector | 55 | lb/MMtons clinker (30 day rolling average) |
| **Total Hydrocarbons (THC):** | | |
| From Kiln Fabric Collector | 24** | ppmvd @ 7% $O_2$, measured as propane (30 day rolling average) |
| **Hydrogen Chloride (HCl):** | | |
| From Kiln Fabric Collector | 3 | ppmvd @ 7% $O_2$ (30 day rolling average if demonstrated with a CEMS) |

*This limit only applies if the average inlet temperature to first PM control device is greater than 400 $^oF$ during D/F performance test, otherwise the applicable limit is 0.40 ng/dscm.
**Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP.

(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 a period of five years. (Rules 201.1, 209 and 210.1)

Emission Unit 027 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **027** | **Clinker Cooling System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Clinker Cooling System, including following equipment:

A. Clinker coolers (H2-6-QC1, QC2, and QC3), breaker (H2-6-IC1), drag conveyor (H2-6-DRC1), and nine cooling air blowers (H2-6-B1 thru B9) with ventilation by fabric collector (H2-6-DC1);
B. Dust settling chamber (prior to fabric collector);
C. Clinker cooler fabric dust collector (H2-6-DC1) with 2,016 - 12 in. dia. by 20 ft. 10 in. long fiberglass twill filter tubes, reverse air cleaning mechanism with 50 hp air reversal fan and 1,750 hp exhaust fan;
D. Two clinker drag conveyor belts (H2-6-DCR2 and DCR3) with dust control ventilation by dust collector (H2-6-DC3);
E. Clinker bucket elevator (H2-6-BE1) with dust control ventilation by dust collector (H2-6-DC3);
F. Clinker diverter gate (H2-6-DG1) to conveyor belt (H2-6-BC1) under normal conditions and to ground under emergency conditions;
G. Clinker belt conveyor (H2-6-BC1) with dust control ventilation by fabric collector (H2-6-DC3) goes to existing clinker storage building;
H. Clinker transport fabric dust collector (H2-6-DC3) with 128 - 4.75" in. dia. by 10 ft. long polyester filter tubes, pulse jet cleaning mechanism, and 25 hp exhaust fan;
I. Two telescoping clinker loader or equivalent (connected to diverter gate, for emergency use only);and
J. Clinker sampler (H2-6-SX1).

**OPERATIONAL CONDITIONS:**

1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F, Rule 423, 40 CFR Part 63 Subpart LLL)
2. Material removed from fabric dust collectors shall be returned to product stream. (Rule 210.1)
3. Fabric dust collectors shall have operational differential pressure indicators. (Rule 210.1)
4. Volume flowrate through clinker cooler fabric dust collector (H2-6-DC1) shall at no time exceed 360,000 acfm. (Rule 210.1)
5. This system shall not have fugitive particulate sources. (Rule 210.1)
6. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector H2-6-DC3 in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR Part 64)

**COMPLIANCE TESTING:**

Compliance clinker cooler dust collector (H2-6-DC1) shall be demonstrated annually by independent lab pursuant to Rule 108.1 and District Source Test Guidelines. (Rule 108.1)

Emission Unit 027 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector H2-6-DC1: | 0.015 | gr/scf |
| | 24.69 | lb/hr |
| | 592.56 | lb/day |
| | 108.14 | ton/yr |
| Fabric Collector H2-6-DC3: | 0.015 | gr/scf |
| Subject to CAM | 0.90 | lb/hr |
| | 21.60 | lb/day |
| | 3.94 | 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 032 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **032** | **Standby Piston Engine with Generator** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. 1,566 bhp diesel fueled piston engine, turbocharged and water-cooled;
B. Blower pressure relief valve $NO_X$ control; and
C. 2,100 kW electrical power generator (shared with EU 1003033).

**OPERATIONAL CONDITIONS:**

1. Fuel oil sulfur content shall not exceed 0.05% by weight. (Rule 210.1)
2. Fuel oil consumption shall not exceed 80.1 gallons per hour at full load conditions. (Rule 210.1)
3. Engine shall not operate more than ½ hour in any day for function and maintenance check without prior District approval. (Rule 210.1)
4. Engine shall not operate for longer than ½ hour unless pyroprocessor kiln (EU 1003026), roller mill (EU 1003024), are shut down and have no emissions. (Rule 210.1)
5. Engine shall be equipped with fuel oil flow meter. (Rule 209)
6. Engine shall be equipped with hours of operation recorder. (Rule 209)
7. Engine shall be in compliance with requirements of 40 CFR Part 63 Subpart ZZZZ. (Rule 423, 40 CFR Part 63 Subpart ZZZZ)

**EMISSION LIMITS:**

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

**Power Generation Mode:**

**Particulate Matter:** 3.13 lb/hr

**Sulfur Compounds (of $SO_2$):** 0.55 lb/hr

**Oxides of Nitrogen (as $NO_2$):** 31.32 lb/hr

**Hydrocarbons:** 4.70 lb/hr

**Carbon Monoxide:** 10.96 lb/hr

Emission Unit 032 Permit Conditions

**Function/Maintenance Mode:**

**Particulate Matter:** 1.96 lb/hr

**Sulfur Compounds (of $SO_2$):** 0.16 lb/hr

**Oxides of Nitrogen (as $NO_2$):** 6.34 lb/hr

**Hydrocarbons:** 2.94 lb/hr

**Carbon Monoxide:** 1.75 lb/hr

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

Emission rates for $SO_2$, $NO_2$, and HC have been determined to constitute LAER on basis that no more than 180 hours per year of power generation operation and 18 hours per year of function/maintenance operations are carried out. (Rule 210.1 LAER Requirement)

Any increase in hours of operation will require installation of air pollution control provisions deemed to constitute LAER at such time of application and conversion to gas-firing. (Rule 210.1 LAER Requirement)

**COMPLIANCE TESTING REQUIREMENTS:**

Compliance with particulates, oxides of nitrogen, hydrocarbons, and carbon monoxide emission limits shall be demonstrated under "function/maintenance mode" by District-witnessed sample collection by independent testing laboratory upon detection of visible emissions exceeding 20% opacity or Ringelmann 1. (Rule 108.1)

Compliance with sulfur compounds emission limit shall be demonstrated by record of fuel sulfur content analysis by independent testing laboratory upon detection of visible emissions exceeding 20% opacity or Ringelmann 1. (Rule 108.1)

**SPECIAL CONDITION:**

California Portland Cement Company shall maintain accurate records of fuel sulfur content of each fuel shipment received, hours of operations of engine, and daily fuel consumption and shall make such records readily available for District inspection upon request. (Rule 107.1)

Emission Unit 033 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **033** | **Standby Piston Engine with Generator** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. 1,578 bhp diesel fueled piston engine, turbocharged and water-cooled;
B. Blower pressure relief valve for $NO_X$ control; and
C. 2,100 kW electrical power generator (shared with EU 1003032).

**OPERATIONAL CONDITIONS:**

1. Fuel oil sulfur content shall not exceed 0.05% by weight. (Rule 210.1)
2. Fuel oil consumption shall not exceed 80.1 gallons per hour at full load conditions. (Rule 210.1)
3. Engine shall not operate more than ½ hour in any day for function and maintenance check without prior District approval. (Rule 210.1)
4. Engine shall not operate for longer than ½ hour unless pyroprocessor kiln 6 (EU 1003026), roller mill (EU 1003024), are shut down and have no emissions. (Rule 210.1)
5. Engine shall be in compliance with requirements of 40 CFR Part 63 Subpart ZZZZ. (Rule 423, 40 CFR Part 63 Subpart ZZZZ)

**EMISSION LIMITS:**

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

| | |
|---|---|
| **Particulate Matter:** | 3.16 lb/hr |
| **Sulfur Compounds (of $SO_2$):** | 0.55 lb/hr |
| **Oxides of Nitrogen (as $NO_2$):** | 31.56 lb/hr |
| **Hydrocarbons:** | 4.73 lb/hr |
| **Carbon Monoxide:** | 11.05 lb/hr |

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

Emission rates for $SO_2$, $NO_2$, and HC have been determined to constitute LAER on the basis that no more than 180 hours per year of power generation operation and 18 hours per year of function/maintenance operations are carried out. (Rule 210.1 LAER requirement)

Any increase in hours of operation will require installation of air pollution control provisions deemed to constitute LAER at such time of application and conversion to gas-firing. (Rule 210.1 LAER requirement)

**COMPLIANCE TESTING REQUIREMENTS:**

Compliance with particulates, oxides of nitrogen, hydrocarbons, and carbon monoxide emission limits shall be demonstrated under "function/maintenance mode" by District-witnessed sample collection by independent testing laboratory upon detection of visible emission exceeding 20% opacity or Ringelmann 1. (Rule 108.1)

Compliance with sulfur compounds emission limit shall be demonstrated by records fuel sulfur content analysis by independent testing laboratory upon detection of visible emissions exceeding 20% opacity or Ringelmann 1. (Rule 108.1)

**SPECIAL CONDITION:**

California Portland Cement Company shall maintain accurate records of fuel sulfur content of each fuel shipment received, hours of operations of engine, and daily fuel consumption and shall make such records readily available for District inspection upon request. (Rule 107.1)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **042** | **Piston Engine with Welder** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Piston Engine with Welder, including following equipment:

70-bhp gasoline fueled piston engine powering welder.

**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 ($SO_2$). (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 423 and 427. (Rule 423, 40 CFR Part 63 Subpart ZZZZ and Rule 427)

Emission Unit 044 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **044** | **Piston Engine with Compressor** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Piston Engine with Compressor, including following equipment:

80.5-bhp diesel fueled piston engine powering compressor and equipped with crankcase ventilation, aftercooler, and turbocharger.

**OPERATIONAL CONDITIONS:**

1. Engine shall have operational elapsed time meter indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Hours of operation shall not exceed 227 hours per year without prior District approval. (Rule 210.1)
3. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
4. Engine shall be equipped with crankcase vent control device. (Rule 210.1 BACT Requirement)
5. Visible emissions shall not exceed Ringelmann No. ¼ or 5% opacity after engine achieves normal operating temperature. (Rule 210.1 BACT Requirement)
6. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
7. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO2). (Rule 407)
8. Owner/operator shall service engine in accordance with following NOx minimization schedule:
9. Lubricating oil and filter (if so equipped): Change once every three months or after no more than 300 hours of operation:
    a. Inlet air filter: Clean once every three months or after no more than 300 hours of operation; replace (if cartridge type) once every 1000 hours of operation;
    b. Fuel filter: Clean every year or replace (if cartridge type) once every 1000 hours of operation;
    c. Intake and exhaust valves (if so equipped and adjustable) and carburetor mixture (if adjustable): Check and adjust (if necessary) to factory specifications once every year or after no more than 1000 hours of operation;
    d. Spark plugs and ignition points (if so equipped): Replace after 3000 hours of operation;
    e. Coolant (if so equipped): Change once a year; and
    f. Exhaust system: Check for leaks and/or restrictions once a year. (Rule 427)
10. Owner/operator shall comply with monitoring, administrative requirements and test methods of Rule 423 and 427. (Rule 423, 40 CFR Part 63 Subpart ZZZZ and Rule 427)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
12. 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 209)

13. No emissions 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:

| | | |
|---|---|---|
| **Particulate Matter (as $PM_{10}$):** | 0.30 | g/bhp-hr (CCR 93115) |
| | 0.05 | lb/hr |
| | 0.42 | lb/day |
| | 0.01 | ton/yr |
| **Sulfur Oxides (as $SO_2$):** | 0.01 | lb/day |
| | 0.00 | ton/yr |
| **Oxides of Nitrogen (as $NO_2$):** | 5.60 | g/bhp-hr (BACT) |
| | 0.99 | lb/hr |
| | 7.90 | lb/day |
| | 0.11 | ton/yr |
| **Volatile Organic Compounds (VOC):** | 0.18 | lb/hr |
| | 1.41 | lb/day |
| | 0.02 | ton/yr |
| **Carbon Monoxide:** | 0.65 | lb/hr |
| | 5.22 | lb/day |
| | 0.07 | 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)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **048** | **Piston Engine** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Piston Engine, including following equipment:

95-bhp diesel fueled piston engine powering a fire pump.

**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 ($SO_2$). (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 423 and 427. (Rule 423, 40 CFR Part 63 Subpart ZZZZ and Rule 427)

Emission Unit 049 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **049** | **Piston Engine with Washer** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Piston Engine with Washer, including following equipment:

95-bhp diesel fueled piston engine powering high pressure washer.

**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 ($SO_2$). (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 423 and 427. (Rule 423, 40 CFR Part 63 Subpart ZZZZ and Rule 427)

Emission Unit 051 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **051** | **Vacuum Truck** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

Vacuum Truck, including the following equipment: One diesel fueled truck (permit exempt) powering a vacuum 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 ($SO_2$). (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 053 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **053** | **Kiln Engine** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Kiln Engine, including following equipment:

180-bhp propane fueled kiln engine.

**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 ($SO_2$). (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 423 and 427. (Rule 423, 40 CFR Part 63 Subpart ZZZZ and Rule 427)

Emission Unit 054 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **054** | **Bulk Clinker Truck Loadout Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Bulk Clinker Truck Loadout Operation, including following equipment:

A. 24-inch wide by 200-feet long belt conveyor (H2-6-BC3) with 20-hp motor;
B. Bulk clinker storage bin (Bin #1); and
C. Fabric collector (D3-DC8) with 1,425-sq. ft. filter area, pulse jet cleaning mechanism, 20-hp motor, and discharge belt conveyor.

**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. Visible emissions from fabric collector shall not exceed 5% opacity. (Rule 210.1)
4. Fabric collectors shall be maintained in proper working order. (Rule 210.1)
5. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
6. Material removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
7. Bulk clinker storage bin shall be vented to dust collector. (Rule 210.1)
8. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
9. Bulk clinker storage bin and connections shall be maintained "dust-tight"; equipment shall be maintained so as not to allow visible greater than 5% opacity or fugitive emissions. (Rules 210.1)
10. Visible emissions from any point of bulk clinker truck loadout operation shall not exceed 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
11. 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 Unit 054 Permit Conditions

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector #D3-DC8 | 0.008 | gr/scf |
| | 0.34 | lb/hr |
| | 8.23 | lb/day |
| | 1.50 | 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 055 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **055** | **Finish Grinding Operation #2** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #2, including following equipment:

A. Conveying equipment from clinker and gypsum bins and transfer points to existing belt (D3-BC1) with four insertable dust collectors with pulse jet cleaning mechanism, (FOW-1-DC1 and FOW-2-DC1) shared with finish mills 1-5 EUs 1003017 and 1003055-058 and (FOW-3-DC1 and FOW-6-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and finish mills 1-3, EU 1003004, each with 5 hp fan;
B. Finish mill D3-F2 with fabric dust collector (FM-2-DC1) with 240 - 5.875 in. dia. by 10 ft. long polyester filter tubes, reverse pulse jet cleaning mechanism and 75 hp exhaust fan;
C. Two separator assemblies;
D. Conveying equipment with fabric collector (D3-F2-DC2);
E. Conveying equipment with one fabric collector (D3-DC1) shared with finish mills 1-5, EU 1003017 and 1003055-058;
F. 36 cement storage silos with 18 interstices and four fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with EU 1003017 and 1003055-059; and
G. Conveyors with two fabric collectors (D3-DC6 and D3-DC7) shared with finish mills 1-6, EU 1003017 and 1003055-059.

**OPERATIONAL CONDITIONS:**

1. Maximum process weight shall not exceed 25-tons per hour. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall not exceed 0.1 gr/scf. (Rule 404)
3. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
4. Conveyor covers and elevator hoods shall be maintained. (Rule 209)
5. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
7. Fabric collectors shall operate whenever associated equipment is operating. (Rule 209)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector FM-2-DC1: | 0.02 | gr/scf |
| | 3.43 | lb/hr |
| | 82.29 | 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 056 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **056** | **Finish Grinding Operation #3** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #3, including following equipment:

A. Conveying equipment from clinker and gypsum bins and transfer points to existing belt (D3-BC1) with four insertable collectors with pulse jet cleaning mechanism, (FOW-1-DC1 and FOW-2-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and (FOW-3DC1 and FOW-6-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and finish mills 1-3, EU 1003004, each with 5 hp fan;
B. Finish mill D3-F3 with fabric collector (D3-F3-DC1) with 240 - 5.875 in. dia. by 10 ft. long polyester filter tubes, reverse pulse jet cleaning mechanism and 75 hp exhaust fan;
C. Two separator assemblies;
D. Conveying equipment with fabric collector (D3-F3-DC2;
E. Conveying equipment with one fabric collector (D3-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058;
F. 36 cement storage silos with 18 interstices and four fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with EUs 1003017 and 055-059; and
G. Conveyors with two fabric collectors (D3-DC6 and D3-DC7) shared with finish mills 1-6, EUs 1003017 and 1003055-059.

**OPERATIONAL CONDITIONS:**

1. Maximum process weight shall not exceed 25-tons per hour. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall not exceed 0.1 gr/scf. (Rule 404)
3. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
4. Conveyor covers and elevator hoods shall be maintained. (Rule 209)
5. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
7. Fabric collectors shall operate whenever associated equipment is operating. (Rule 209)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector D3-F3-DC1: | 0.02 | gr/scf |
| | 3.43 | lb/hr |
| | 82.29 | 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 057 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **057** | **Finish Grinding Operation #4** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #4, including following equipment:

A. Conveying equipment from clinker and gypsum feed bins and transfer points to existing belt (D3-BC1) with four insertable collectors with pulse jet cleaning mechanism, (FOW-1-DC1 and FOW-2-DC1) shared with finish mills 1-5, EUs 1003017 and 103055-058 and (FOW-3-DC1 and FOW-6-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and finish mills 1-3, EU 1003004, each with 5-hp fan;
B. Finish mill D3-F4 with fabric collector (D3-F4-DC1) with 240 - 5.875 in. dia. by 10 ft. long polyester filter tubes, reverse pulse jet cleaning mechanism and 75 hp exhaust fan;
C. Two separator assemblies;
D. Conveying equipment with fabric collector (D3-F4-DC2);
E. Conveying equipment with one fabric collector (D3-DC1) shared with finish mills 1-5, EU 1003017 and 1003055-058;
F. 36 cement storage silos with 18 interstices and four fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with EUs 1003017 and 055-059; and
G. Conveyors with two fabric collectors (D3-DC6 and D3-DC7) shared with finish mills 1-6, EUs 1003017 and 1003055-059.

**OPERATIONAL CONDITIONS:**

1. Maximum process weight shall not exceed 25-tons per hour. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall not exceed 0.1 gr/scf. (Rule 404)
3. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
4. Conveyor covers and elevator hoods shall be maintained. (Rule 209)
5. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
7. Fabric collectors shall operate whenever associated equipment is operating. (Rule 209)

**EMISSION LIMITS:**

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

Emission Unit 057 Permit Conditions

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector D3-F4-DC1: | 0.02 | gr/scf |
| | 3.43 | lb/hr |
| | 82.29 | 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 058 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **058** | **Finish Grinding Operation #5** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #5, including following equipment:

A. Conveying equipment from clinker and gypsum feed bins and transfer points to existing belt (D3-BC1) with four insertable collectors with pulse jet cleaning mechanism (FOW-1-DC1 and FOW-2-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and (FOW-3-DC1 and FOW-6-DC1) shared with finish mills 1-5, EUs 1003017 and 1003055-058 and finish mills 1-3, EU 1003004, each with 5-hp fan;
B. Finish mill D3-F5 with fabric collector (D3-F5-DC1) with 240 - 5.875 in. dia. by 10 ft. long polyester filter tubes, reverse pulse jet cleaning mechanism and 75 hp exhaust fan;
C. Two separator assemblies;
D. Conveying equipment with fabric collector (D3-F5-DC2);
E. Conveying equipment with one fabric collector (D3-DC1) shared with finish mills 1 - 5, EU 1003017 and 1003055-059;
F. 36 cement storage silos with 18 interstices and four fabric collectors (D3-DC2, D3-DC3, D3-DC4, and D3-DC5) shared with EUs 1003017 and 055-059; and
G. Conveyors with two fabric collectors (D3-DC6 and D3-DC7) shared with finish mills 1 - 6, EUs 1003017 and 055-059.

**OPERATIONAL CONDITIONS:**

1. Maximum process weight shall not exceed 25-tons per hour. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall not exceed 0.1 gr/scf. (Rule 404)
3. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
4. Conveyor covers and elevator hoods shall be maintained. (Rule 209)
5. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
7. Fabric collectors shall operate whenever associated equipment is operating. (Rule 209)

**EMISSION LIMITS:**

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

Emission Unit 058 Permit Conditions

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Fabric Collector D3-F5-DC1: | 0.02 | gr/scf |
| | 3.43 | lb/hr |
| | 82.29 | 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 059 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **059** | **Finish Grinding Operation #6** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Finish Grinding Operation #6, including following equipment:

A. Clinker feed bin #2;
B. Gypsum feed bin #7;
C. New limestone feed bin #8;
D. Fabric collector D3-F6-DC3 rated at 800 cfm and 2-hp fan;
E. Conveying equipment from clinker, gypsum and limestone feed bins with fabric collector (D3-FM6-DC2) rated at 900 cfm and 5-hp fan;
F. Finish mill #6 with fabric collector (D3-FM6-DC1);
G. One separator assembly;
H. 36 cement storage silos with 18 interstices and four fabric collectors (D3-DC2, D3-DC3, D3-DC4 and D3-DC5) shared with EUs 1003017 and 1003055-059; and
I. Conveyors with two fabric collectors (D3-DC6 and D3-DC7) shared with finish mills 1 - 6, EUs 1003017 and 1003055-058.

**OPERATIONAL CONDITIONS:**

1. 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)
2. Fabric dust collectors shall be equipped with operational pressure differential indicator. (Rule 209)
3. Fabric dust collectors shall be maintained at manufacturer's recommended differential pressure to insure proper operation. (Rule 209)
4. Particulate matter emissions from fabric collectors D3-FM6-DC1 and D3-FM6-DC2 shall be no more than 0.01 gr/scf. (Rule 210.1)
5. Visible emissions from fabric collectors shall not exceed 5% opacity. (Rule 210.1 BACT)
6. Fugitive emission points shall not exhibit visible emissions. (Rule 210.1)
7. Exhaust gas flow rate from fabric collector (D3-FM6-DC2) shall not exceed 2,000 acfm. (Rule 210.1)
8. Exhaust gas flow rate from fabric collector (D3-FM6-DC1) shall not exceed 60,000 acfm. (Rule 210.1)
9. Maximum process weight shall not exceed 60 tons per hour. (Rule 210.1)
10. Conveyor covers and elevator hoods shall be maintained. (Rule 210.1
11. Conveyors shall be covered when in operation. (Rule 210.1)
12. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
13. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
14. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
15. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)

16. 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)
17. 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 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:

**Particulate Matter:**

| | |
|---|---|
| Fabric Collector, D3-F6-DC3 | 0.01 grains/dscf (of PM) (Rule 210.1 BACT)<br>0.07 lb/hr<br>1.66 lb/day<br>0.30 ton/yr |
| Fabric Collector D3-FM6-DC1 | 0.01 grains/dscf (of PM) (Rule 210.1 BACT)<br>0.17 lb/hr (of $PM_{10}$)<br>4.11 lb/day (of $PM_{10}$)<br>0.75 ton/yr (of $PM_{10}$) |
| Fabric Collector D3-FM6-DC2 | 0.01 grains/dscf (of PM) (Rule 210.1 BACT)<br>5.14 lb/hr (of $PM_{10}$)<br>123.43 lb/day (of $PM_{10}$)<br>22.53 ton/yr (of $PM_{10}$) |

(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 061 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **061** | **Portable Crushing Plant** |

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Portable Crushing Plant and Screening Plant, including following equipment:

A. Vibrating feed and loading hoper with electric motor rated up to 20-hp.
B. Vibrating screen with electric motor rated up to 15-hp.
C. Crusher with electric motor rated up to 75-hp.
D. Six (6) conveyor belts driven by electric motors totaling 65-hp.

**OPERATIONAL CONDITIONS:**

1. Monthly throughput rate to this crusher shall not exceed 55,300 tons. (Rule 210.1)
2. Wet suppression shall be used during material loading, screening, conveying, crushing, and transferring, to minimize particulate matter emission resulting from operation. (Rule 210.1)
3. Visible emissions from portable crusher shall not exceed 12% opacity or ¼ Ringelmann for 3 minutes in any one-hour. (Rule 210.1 & Rule 422, 40 CFR Part 60 Subpart OOO)
4. Visible emissions from screening units, and conveyors shall not exceed 7% opacity or ¼ Ringelmann for 3 minutes in any one-hour. (Rule 210.1 & Rule 422, 40 CFR Part 60 Subpart OOO)
5. Owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system, and shall initiate corrective action within 24 hours if water is not flowing properly. (Rule 422, 40 CFR Part 60 Subpart OOO)
6. Drop heights shall be kept at a minimum to limit visible emissions. (Rule 209)
7. 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)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
9. Crushing operation may be used for processing recycled kiln brick or raw materials for clinker production process. (Rule 210.1)
10. Crushed kiln brick shall not be stockpiled uncovered outside. (Rule 210.1)
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. 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 427)
13. 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)
14. 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)
15. Total equipment rating shall not exceed 175-hp without prior District approval. (Rule 210.1)

Emission Unit 061 Permit Conditions

**EMISSION LIMITS:**

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

| | | |
|---|---|---|
| **Particulate Matter ($PM_{10}$):** | 1.31 | lb/hr |
| (Crushing, Screening, Transfer, and Loading Emissions) | 5.97 | lb/day |
| | 1.09 | 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)

Emission Unit 062 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **062** | **Paint Spray Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Paint Spray Operation, including following equipment:

Binks auto-sized spray booth with paint arrestor filters, 14 ft. wide x 9 ft. high x 26 ft. deep.

**OPERATIONAL CONDITIONS:**

1. Operator shall maintain use records demonstrating facility-wide daily VOC emissions from painting of metal parts and products (as defined in Rule 410.4) do not exceed 15.00 lbs. in any one day. Records may be maintained on extended basis provided such records show emissions are less than 15 lbs. VOC for entire extended period.
2. Exhaust filters shall be replaced when differential pressure reaches 0.5 in. W.C. (Rule 209)
3. Storage and Disposal: Regardless of VOC content, all VOC-containing materials used in solvent cleaning operations, such as solvents, and cloth and paper moistened with solvents, shall be stored in non-absorbent, non-leaking containers kept closed at all times except when filling or emptying. (Rule 209)
4. Coatings containing chromium compounds (examples, Zinc Chromate, Strontium Chromate, and Barium Chromate) shall not be spray applied. Roll, dip, or brush applications may be used. (Rule 419 and CH&SC, Sec 41700)
5. Architectural coatings shall comply with Rule 410.1.
6. Operation shall not cause nuisance to nearby receptors. (Rule 419)
7. Coating of Motor Vehicles and Mobile Equipment: (Rule 410.4A)
   a. Except as provided below, no person shall refinish, or spot/panel repair any car, truck, van, or motorcycle, or where color match is required, any bus, mobile equipment, or parts and components of such vehicles or equipment, using coating with VOC content in excess of following limits as applied:

**VOC Content Limits**
**(Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds)**

| Coating Type | Max VOC | |
|---|---|---|
| Pretreatment Wash Primer | 780 g/l | (6.5 lb/gal) |
| Primer/Primer Surfacer/Precoat | 250 | (2.1) |
| Primer Sealer | 420 | (3.5) |
| Multistage Topcoat | 540 | (4.5) |
| Singlestage Topcoat | 420 | (3.5) |
| Metallic/Iridescent Topcoat | 540 | (4.5) |

   b. Except as provided above, where color match is not required, no person shall refinish or spot/panel repair any bus, or mobile equipment, or parts and components of such vehicle or equipment using coating with VOC content in excess of following limits as applied:

**VOC Content Limits**
**(Grams of VOC Per Liter of Coating Less Water and Less Exempt Compounds)**

| **Coating Type** | **Max VOC** | |
|---|---|---|
| Pretreatment Wash Primer | 780 g/l | (6.5 lb/gal) |
| Primer/Primer Surfaces/Primer Sealer/Precoat | 250 | (2.1) |
| Topcoat | 420 | (3.5) |
| Metallic/Iridescent Topcoat | 420 | (3.5) |
| Extreme Performance | 420 | (3.5) |
| Camouflage | 420 | (3.5) |

8. Coating of Metal Parts and Products (Rule 410.4). (Exempt if less than 15 lb-VOC/day, see Condition 1) No person shall coat any metal part or product excluding those motor vehicles and mobile equipment covered by Rule 410.4A, with VOC content in excess of following limits as applied:
   a. All coatings except those in b., following, 340 g/l (2.8 lb/gal); and
   b. Camouflage, Extreme Performance, Heat Resistant, High Gloss High Performances Architectural, High Temperature, Metallic Topcoat, Silicone Release, and Solar Absorbent Coatings shall not exceed 420 g/l (3.5 lb/gal.).
9. HVLP spray guns shall be operated with air pressure at gun of between 0.1 and 10 psig and with fluid pressure of no more than 50 psig. (Rules 410.4 and 410.4A)
10. Application Equipment Requirements. (Rules 410.4 and 410.4A)
    No person shall coat any vehicle, or mobile equipment, or parts and components of such vehicles and equipment, unless one of following methods is used:
    a. Brush, dip, or roll coating conducted in accordance with manufacturer's recommendations;
    b. Electrostatic or electrodeposition application conducted in accordance with manufacturer's recommendations;
    c. High Volume Low Pressure (HVLP) spray equipment operated in accordance with manufacturer's recommendations; or
    d. Non-refillable aerosols may only be used to repair minor surface damage and imperfections, provided area to be covered does not exceed 9 square feet.
11. Surface Preparation and Equipment Cleanup Requirements. (Rules 410.4 and 410.4A)
    No person shall conduct surface preparation or equipment cleanup for activities subject to provisions of this Rule unless following VOC limits are met and methods are used:
    a. Surface Cleaning: No material shall be used containing VOC in excess of 200 grams per liter (1.7 lb/gal) of material to remove dirt, oils, or other contaminants prior to application of surface coatings or adhesives;
    b. Stripping: No material shall be used containing VOC in excess of 200 grams per liter of material to strip any coating;
    c. Cleaning of Coatings Application Equipment: Solvents used for cleaning of coatings application equipment shall comply with both limits specified below:
       1.) Solvent shall have VOC content of 950 grams or less per liter (7.9 lb/gal) of material; and
       2.) Solvent shall have VOC composite partial pressure of 35 mm Hg or less at 20°C (68°F).
    d. Cleaning Devices and Methods Requirements: No person shall perform solvent cleaning operations unless one of following cleaning devices or methods is used:
       1.) Wipe cleaning;
       2.) Spray bottles or containers with maximum capacity of 16 fluid ounces from which solvents are applied without propellant-induced force;

3.) Cleaning equipment having closed solvent container during cleaning operations, except when depositing and removing objects to be cleaned, and closed during nonoperation except during maintenance and repair of cleaning equipment itself;
4.) Remote reservoir cold cleaner operated in conformance with Rule 410.3;
5.) System totally enclosing spray guns, cups, nozzles, bowls, and other parts during washing, rinsing, and draining procedures;
6.) Non-atomized solvent flow method collecting cleaning solvent in container or collection system closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container; or
7.) Solvent flushing method discharging cleaning solvent into container closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside container. Discharged solvent from such equipment shall be collected into containers without atomizing into open air. Solvent may be flushed through system by air or hydraulic pressure, or by pumping.

12. Touch-up, primers, primer surfacers, and precoats may be applied outside of spray booth provided total surface covered does not exceed 9 square feet per vehicle and provided coating does not contain lead or chromium compounds. All other motor vehicles and mobile equipment coatings shall be applied within operational spray booth. Operator may request, on case by case basis, written approval to coat vehicles unable to fit in spray booth. (Rule 410.4A)
13. Record Keeping Requirements: (Rules 410.4 and 410.4A)
    a. Current list of VOC containing products in use containing all data necessary to evaluate compliance, including following information, as applicable:
        1.) Material name and manufacturer's identification;
        2.) Application method;
        3.) Material type and specific use instructions, for example, "single stage topcoat" or "precoat shall be applied to bare metal and followed with compliant primer";
        4.) Specific mixing instructions;
        5.) Maximum VOC content of coating as applied, including thinning solvents, hardeners, etc., excluding water and exempt compounds; and
        6.) Coating composition and density.
    b. Daily job, coating, and solvent use records, including following information:
        1.) Type of vehicle, equipment, part, or component coated;
        2.) Application method (HVLP, brush, rag, aerosol, etc.);
        3.) Specific coatings used on each job, e.g. pretreatment wash primer, precoat, topcoat;
        4.) Volume in gallons (or liters) of each component and mix ratio;
        5.) VOC content in pounds/gallon (or grams/liter) as applied/used;
        6.) Specific solvents used;
        7.) Volume of each solvent used in gallons (or liters); and
        8.) Primers and primer surfacers mixed for use on multiple units may be recorded as single line item provided quantity and VOC content are recorded.
    c. Purchase records showing date, type, and amount of VOC containing material shall be maintained and be made available to District personnel upon request.
    d. All records shall be maintained for three years and made available for inspection by Control Officer upon request.

Emission Unit 063 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **063** | **Quarry Drill #1** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Quarry Drill #1, including following equipment:

A. Cat MD6290 quarry blast hole drill with permit-exempt 800-hp Caterpillar Model C27 diesel piston engine; and
B. Dust collector, Model FC-4500, with dust collection system and water injection dust suppression.

**OPERATIONAL CONDITIONS:**

1. Quarry drill #1 shall be equipped with wet suppression dust control system. (Rule 210.1 BACT Requirement)
2. Visible emissions from drill shall not exceed 10% opacity or Ringelmann No. 1/2 for more than three minutes in any one hour during normal operations. (Rule 210.1 BACT Requirement)
3. Engine exhaust gas particulate matter concentration shall not exceed 0.1 gr/scf @ 12% $CO_2$. (Rule 409)
4. Diesel engine shall be fired on diesel fuel with a sulfur content not to exceed 0.05%. (Rule 210.1 BACT Requirement)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Drilling Emissions: | 0.08 | lb/hr |
| | 1.87 | lb/day |
| | 0.25 | 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 064 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **064** | **Quarry Drill #2** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Quarry Drill #2, including following equipment:

A. Atlas Copco, Model FlexiROC D65, quarry blast hole drill with 539-bhp Caterpillar, Model C15, diesel fueled piston engine; and
B. Dust collar with collection system and water injection dust suppression.

**OPERATIONAL CONDITIONS**:

1. Combined drilling operation for PTO 1003064C and 1003080 shall not exceed 133 holes/day and 20,000 holes/year without prior District approval. (Rule 210.1)
2. ration for PTO 1003064C and 1003080 shall not exceed 133 holes/day and 20,000 holes/year without prior District approval. (Rule 210.1)
3. Quarry blast hole drill shall be equipped with water injection system and dust collection system.
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 401)
5. Visible emissions from drilling operation shall not exceed 10% opacity or Ringelmann No. 1/2 for more than 3 minutes in any one hour. (Rule 210.1)
6. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/$ft^3$ of gas at standard conditions. (Rule 404.1)
7. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 209)
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1 and Rule 209)
9. 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 or District personnel. Record shall include, at minimum, holes made, days and hours of operation.
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 209)
11. 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 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 064 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 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 ($PM_{10}$):**

| | | |
|---|---|---|
| **Hole Drilling Emissions:** | 1.32 | lb/hr |
| | 31.65 | lb/day |
| | 2.38 | ton/yr |

**Emission limits shared with Permit No. 1003080*

(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 the District for period of five years. (Rules 201.1, 209 and 210.1)

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **065** | **Finish Mill System** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. Two clinker weigh feeders, D4-1-WF1 and D4-1-WF2, ventilated to item F;
B. Two gypsum/mineral addition feeders, D4-1-WF3 and D4-1-WF4, ventilated to item F;
C. Two additive weigh feeders, D4-1-WF5 and D4-1-WF6, ventilated to item F
D. Gypsum/clinker/mineral addition conveyor, D4-1-BC1, ventilated to item F and G;
E. Gypsum/clinker/mineral addition conveyor, D4-1-BC2 ventilated to item L;
F. 7.5-hp, 1,500-acfm pulse-jet fabric collector, D4-1-DC3, with double tipping valve feeding to item E;
G. 20-hp, 3,000-acfm, pulse-jet fabric collector, D4-1-DC4, with double tipping valve feeding to item D;
H. 7.5-hp 24-inch by 20-ft. OK mill recirculation belt conveyor, D4-1-BC3, with vibrating feeder ventilated to item K and recirculated to item H;
I. 60-hp, 15.75-inch gypsum/clinker/mineral addition bucket elevator, D4-1-BE1, with 2-hp inching drive and 7.5-hp electric hoist ventilated to item K;
J. 7.5-hp 30-inch by 34-ft. gypsum/clinker belt conveyor, D4-1-BC4, ventilated to item K;
K. 3-hp magnetic separator belt, D4-1-TM1, with 1.0-hp magnetic separator/magnet;
L. 20-hp 10,000-acfm, pulse-jet fabric collector, D4-1-DC2, with double tipping valve feeding to item H;
M. Pneumatic diverter gate D4-1-DG1;
N. 20 cubic meter steel plate bin, D4-1-B2 with 38-inch by 60-inch slide gate and ventilated to item K (to truck load out);
O. 10 cubic meter steel plate surge bin, D4-1-B1, with 38-inch slide gate ventilated to item K;
P. 10-hp 30-inch by 20-ft. clinker/gypsum belt weigh feeder, D4-1-RM-WF, ventilated to item K;
Q. Rotary feeder mill inlet air lock, D4-1-RF1;
R. 5,000-hp vertical roller OK Mill, D4-1-M, with four rollers and 600-hp ROKSH 90 separator, D4-1-SS-M;
S. Two cyclones, D4-1-CC1 and D4-1-CC2, each with rotary airlocks with emissions fed to item U;
T. Air heater with a 10-hp fan recirculating air to item Q;
U. 2500-hp OK mill system fan, D4-1-DF, ventilating emissions to item U;
V. 150-hp, 61,000-acfm, 16,116 $ft^2$ pulse-jet OK mill vent fabric collector, D4-1-DC1, with 5 hp screw conveyor and 2-hp rotary feeder with cement fed to item V;
W. Three cement transport airslides, D4-1-AS1, D4-1-AS2 and D4-1-AS3 with diverter gates;
X. 10-hp blower ventilating to item V to item U;
Y. Two cement coolers, D4-1-QC1 and D4-1-QC2;
Z. Cement transport air slide, D4-1-AS4, ventilated to item V;
AA. Cement transport system, one 300-hp compressor, D4-1-FP1, and 150-hp pneumatic pump, D4-1-FC1, with diverter valve feeding item BB;

BB. Two cement transport alleviators, D4-1-A1 and D4-1-A2, each with rotary feeders with emissions ventilated to item BB;
CC. Two 15-hp, 6,000-acfm, pulse jet fabric collector, D3-1-DC11, with rotary feeder; and
DD. Airslide from fabric collector D4-1-DC1 to cyclone #2.
EE. 4,800 cfm Fabric Collector D4;

**DESIGN CONDITIONS:**

a. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
b. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
c. Each 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 locations of uniform flow. (Rule 108.1)

**OPERATIONAL CONDITIONS:**

1. Fabric collector D4-1-DC3 filter are shall be at least 134 square feet. (Rule 210.1)
2. Fabric collector D4-1-DC4 filter are shall be at least 667 square feet. (Rule 210.1)
3. Fabric collector D4-1-DC2 filter are shall be at least 67 square feet. (Rule 210.1)
4. Fabric collector D3-1-DC11 filter are shall be at least 400 square feet. (Rule 210.1)
5. Each fabric collector shall be equipped with operational pressure differential indicator. (Rule 209)
6. Each fabric collector shall be equipped with pulse-jet cleaning mechanisms. (Rule 210.1)
7. Each fabric collector shall be equipped with polyester filters or equivalent. (Rule 210.1)
8. Mill outlet air heater shall be equipped with low-NOx burners. (Rule 210.1 BACT)
9. Maximum throughput shall not exceed 250 tons per hour without prior District approval. (Rule 210.1)
10. Mill outlet air heater usage shall not exceed 15,840 MMBtu per year without prior District approval. (Rule 210.1)
11. Fabric collectors D3-1-DC10 and D3-1-DC11 and pump system associated with each fabric collector shall not be operated simultaneously without prior District approval. (Rule 210.1)
12. Fabric collectors shall be in operation when associated equipment is operated. (Rule 210.1)
13. Visible emissions from fabric collector stacks shall not be greater than 5% opacity. (Rule 210.1 BACT)
14. There shall be no visible emissions from fugitive emissions points. (Rule 210.1 BACT)
15. Mill outlet air heater shall have no visible emissions after equipment achieves normal operating temperature. (Rule 210.1 BACT)
16. All piping, ducting and connections shall be leak-tight and shall produce no visible emissions. (Rule 210.1)
17. Material collected in fabric collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
18. Owner/operator shall install and maintain appropriate provisions to monitor operational parameters and/or NOx control system that correlate to NOx emissions. (Rule 425.2)
19. Owner/operator shall comply with applicable administrative requirements of Rule 425.2.
20. Owner/operator shall perform NOx minimization procedures as prescribed by Rule 425.2.
21. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector D4-1-DC3 in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR Part 64)

22. Operation of this equipment shall be conducted in compliance with all data and specifications submitted with application under which this permit is issued. (Rule 210.1, Rule 422, 40 CFR Part 60 Subpart F and Rule 423, 40 CFR Part 63 Subpart LLL)
23. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
24. 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)
25. Exhaust stacks 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)
26. 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. (Rules 209, 210.1 and 425.2)

**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:**

Compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request and official results submitted within 30 days thereafter. (Rule 108.1)

**EMISSION LIMITS:**

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Bin Fabric Collector: | 0.01 | grains/acfm (Rule 210.1 BACT) |
| | 0.86 | lb/hr |
| | 20.57 | lb/day |
| | 3.75 | ton/yr |
| Mill Outlet Fabric Collector: | 0.01 | grains/acfm (Rule 210.1 BACT) |
| | 5.23 | lb/hr |
| | 125.50 | lb/day |
| | 22.90 | ton/yr |
| Pump Fabric Collectors (Combined Emission): | 0.01 | grains/acfm – (Rule 210.1 BACT) |
| | 0.51 | lb/hr |
| | 12.34 | lb/day |
| | 2.25 | ton/yr |

Emission Unit 065 Permit Conditions

| | | |
|---|---|---|
| Plant Conveying Fabric Collector (D4-1-DC3): | 0.01 | grains/acfm – (Rule 210.1 BACT) |
| Subject to CAM | 0.13 | lb/hr |
| | 3.10 | lb/day |
| | 0.56 | ton/yr |
| Plant Conveying Fabric Collector: | 0.01 | grains/acfm – (Rule 210.1 BACT) |
| | 0.26 | lb/hr |
| | 6.17 | lb/day |
| | 1.13 | ton/yr |
| Fabric Collector D4: | 0.005 | gr/scf – (Rule 210.1 BACT) |
| | 0.21 | lb/hr |
| | 4.94 | lb/day |
| | 0.90 | ton/yr |
| Heater D4-1-DC1 | 0.07 | lb/hr |
| | 1.61 | lb/day |
| | 0.06 | ton/yr |
| **Sulfur Oxides (as $SO_2$):** | | |
| Heater D4-1-DC1 | 0.01 | lb/hr |
| | 0.12 | lb/day |
| | 0.00 | ton/yr |
| **Oxides of Nitrogen (as $NO_2$):** | | |
| Heater D4-1-DC1 | 0.08 | lb/MMBtu |
| | 0.72 | lb/hr |
| | 17.16 | lb/day |
| | 0.39 | ton/yr |
| **Volatile Organic Compounds (VOC):** | | |
| Heater D4-1-DC1 | 0.05 | lb/hr |
| | 1.18 | lb/day |
| | 0.04 | ton/yr |
| **Carbon Monoxide:** | | |
| Heater D4-1-DC1 | 400.00 | ppmv (Rule 425.2) |
| | 0.74 | lb/hr |
| | 17.78 | lb/day |
| | 0.65 | 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 066 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **066** | **Sweeper #1** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Sweeper #1, including following equipment:

Mobile sweeper.

**OPERATIONAL CONDITIONS:**

1. Particulate emissions shall be no more than 0.1-gr/scf. (Rule 404.1)
2. 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)
3. Collected dust shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)

Emission Unit 068 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **068** | **Vacuum Truck** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

A. One truck with 215-bhp diesel-fueled engine (permit exempt);
B. One 99-bhp diesel-fueled auxiliary engine equipped with turbocharger and crankcase ventilation providing power to the filtration system; and
C. Filtration system consisting of a filter module with a 14 cubic foot dust retention hopper, four filters and an intermittent air pulse cleaning mechanism.

**OPERATIONAL CONDITIONS:**

1. Visible emissions from vacuum unit exhaust shall be no more than 5% opacity or Ringelmann No. ¼. (Rule 210.1 BACT Requirement)
2. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 210.1 BACT Requirement)
3. Filtration system shall be in operation when vacuum truck is operated. (Rule 210.1)
4. Owner/operator shall service engine in accordance with following NOx minimization schedule:
   a. Lubricating oil and filter (if so equipped): Change once every three months or after no more than 300 hours of operation;
   b. Inlet air filter: Clean once every three months or after no more than 300 hours of operation; replace (if cartridge type) once every 1000 hours of operation;
   c. Fuel filter: Clean every year or replace (if cartridge type) once every 1000 hours of operation;
   d. Intake and exhaust valves (if so equipped and adjustable) and carburetor mixture (if adjustable): Check and adjust (if necessary) to factory specifications once every year or after no more than 1000 hours of operation;
   e. Spark plugs and ignition points (if so equipped): Replace after 3000 hours of operation;
   f. Coolant (if so equipped): Change once a year; and
   g. Exhaust system: Check for leaks and/or restrictions once a year. (Rule 427)
5. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
6. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. Baghouse components and hoses shall be maintained on regular basis to prevent excessive emissions. (Rules 209 and 210.1)
7. 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. (Rules 209 and 210.1)
8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance 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:

| | | |
|---|---|---|
| **Particulate Matter ($PM_{10}$):** | 0.30 | g/bhp-hr (Tier II Standard) |
| | 0.02 | lb/hr |
| | 0.53 | lb/day |
| | 0.10 | ton/yr |
| **Sulfur Oxides (SOx as $SO_2$):** | 0.00 | lb/hr |
| | 0.02 | lb/day |
| | 0.00 | ton/yr |
| **Oxides of Nitrogen ($NO_2$):** | 4.30 | g/bhp-hr (BACT and Tier II Standard) |
| | 0.94 | lb/hr |
| | 22.51 | lb/day |
| | 4.11 | ton/yr |
| **Volatile Organic Compounds (VOC):** | 0.22 | lb/hr |
| **(As defined in Rule 210.1)** | 5.23 | lb/day |
| | 0.96 | ton/yr |
| **Carbon Monoxide:** | 0.22 | lb/hr |
| | 5.23 | lb/day |
| | 0.96 | 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 three years. (Rules 209 and 210.1)

Emission Unit 070 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **070** | **Concrete Batch Plant** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Concrete Batch Plant, including following equipment:

Concrete Batching Operation:

1. Concrete batch plant with storage bins (cement, cement additives, sand, and aggregate), screw conveyors, weigh hopper and fabric collector (with pulse jet cleaning mechanism serving truck loadout {6300-cfm});
2. Radial stacker with electric motor;
3. Outdoor sand storage piles;
4. Outdoor aggregate storage piles;
5. Fabric collector with mechanical cleaning mechanism serving cement storage silo (250-cfm), and
6. Fabric collector with mechanical cleaning mechanism serving additive storage silo plant (250-cfm).

**OPERATIONAL CONDITIONS:**

1. Particulate matter exhaust concentration from each fabric collector (dust collector, bin vent filter) shall not exceed 0.01-gr/acf. (Rule 210.1-BACT Requirement)
2. Conveyors shall be covered or equipped with water sprays. (Rule 210.1)
3. Facility shall have provisions for wetting aggregate. (Rule 210.1)
4. Visible emissions from cement loading and unloading operations shall be less than 5% opacity or Ringelmann No. ¼ except for not more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
5. Visible emissions from concrete batching, aggregate storage operations, and roadways shall be less than 10% opacity or Ringelmann No. ½ except for not more than three minutes in any one-hour. (Rule 210.1)
6. Particulate matter emissions from cement loading and unloading operations shall be no more than 0.01-gr/scf. (Rule 210.1 BACT Requirement)
7. Particulate matter emissions from any single source shall be no more than 0.1-gr/scf. (Rules 210.1 and 404.1)
8. Provisions for wetting aggregate shall be utilized to prevent visible dust emissions in excess of 10% opacity. (Rule 210.1)
9. Concrete production shall not exceed 14,400 tons per day (averaged on monthly basis). (Rule 210.1)
10. Cement transfer to batch plant mixer shall be completely wind-protected by cover or other enclosure. (Rule 210.1)
11. Water application system shall be available to wet aggregate in delivery trucks prior to unloading. (Rule 210.1 BACT Requirement)
12. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 BACT Requirement)

13. 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 209)
14. 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:**

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

**Particulate Matter ($PM_{10}$):**

**Batch Plant:**

| | | |
|---|---|---|
| Silo 1 (143-ton) Bin Vent: | 0.01 | gr/acf |
| (250-cfm) | 0.02 | lb/hr |
| | 0.26 | lb/day |
| | 0.05 | ton/yr |
| Silo 2 (115-ton) Bin Vent: | 0.01 | gr/acf |
| (250-cfm) | 0.02 | lb/hr |
| | 0.05 | lb/day |
| | 0.01 | ton/yr |
| Truck Loadout Fabric Collector: | 0.01 | gr/acf |
| (6300-cfm) | 0.54 | lb/hr |
| | 12.96 | lb/day |
| | 2.37 | ton/yr |
| **Batch Plant Totals:** | 4.86 | lb/hr |
| | 116.74 | lb/day |
| | 3.54 | ton/yr |
| **Aggregate Storage:** | 0.41 | lb/hr |
| | 6.60 | lb/day |
| | 1.20 | ton/yr |

Emission Unit 070 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. (Rules 201.1, 209 and 210.1)

Emission Unit 071 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **071** | **Concrete Storage Guppy** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Concrete Storage Guppy, including following equipment:

Cement Storage Guppy served by cement silo bin vent filter:

A. 162-ton capacity cement storage guppy with 60-hp motor, and
B. Pneumatic conveying system.

**OPERATIONAL CONDITIONS:**

1. Cement storage guppy shall be vented to bin vent filter serving cement storage silo. (Rule 210.1 BACT Requirement)
2. Particulate matter exhaust concentration from each bin vent filter shall not exceed 0.01-gr/acf. (Rule 210.1 BACT Requirement)
3. Visible emissions from cement loading and unloading operations shall be less than 5% opacity or Ringelmann No. ¼ except for not more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
4. Particulate matter emissions from cement loading and unloading operations shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
5. Cement transfer points shall be completely enclosed. (Rule 210.1)
6. Guppy shall be designed to vent only through fabric collector. (Rule 210.1)
7. Pneumatic lines for transfer of cement to storage silo shall have no holes or openings (excluding designed entrance and exit). (Rule 210.1)
8. Dust collected from bin vent filter (fabric collector shall) be returned to silo or added to concrete mix. (Rule 210.1)
9. No more than 2050-tons per day of cement shall be received to guppy without prior District approval. (Rule 210.1)
10. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 BACT Requirement)
11. 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 209)
12. 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)

Emission Unit 071 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 ($PM_{10}$):**
**Cement Guppy:**
Emissions assessed on EU 1003001

(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 072 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **072** | **Vacuum Truck** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

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

Vacuum truck, including the following equipment: One diesel fueled truck (permit exempt) powering a vacuum unit.

**OPERATIONAL CONDITIONS:**

1. Hours of operation shall not exceed 16 hours per day without prior District approval. (Rule 210.1)
2. Vacuum unit exhaust particulate matter ($PM_{10}$) concentration shall be no more than 0.011 gr/dscf. (Rule 210.1 BACT Requirement)
3. Dust collector shall be equipped with vacuum recovery cleaning mechanism. (Rule 209)
4. Visible emissions from vacuum unit exhaust shall be no more than 5% opacity or Ringelmann No. ¼. (Rule 210.1 BACT Requirement)
5. Baghouse shall be in operation when vacuum unit is operated. (Rule 210.1)
6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. Baghouse components and hoses shall be maintained on regular basis to prevent excessive emissions. (Rules 209 and 210.1)
8. 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. (Rules 209 and 210.1)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance 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 073 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **073** | **Packhouse Bulk Truck Loadout Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Packhouse Bulk Truck Loadout Operation, including following equipment:

A. Dust collector with 400-cfm capacity, Model DCL BV25-84;
B. Two dust collectors with 1,800-cfm capacity, Model DCL CFM-470;
C. 300-tons storage bin, PH-1-N5-B1;
D. Pressure blower with 10-hp electric motor, PH-1-N5-B1-BL;
E. 16" HI-TOP Airslide, PH-1-N5-AS1;
F. Pressure blower with 7.5-hp electric motor, PH-1-N5-AS1-BL;
G. Rotary screen with 10-hp electric motor, PH-1-N5-RS1;
H. Two 16" bin filling airslides, PH-1-N5-AS2-A and PH-1-N5-AS2-B;
I. Two diverter gates, PH-1-N5-AS2-DG1 and PH-1-N5-AS2-DG2;
J. Two truck loadout airslides, PH-1-N5-SP1-AS and PH-1-N5-SP2-AS;
K. Two pressure blowers with 3-hp electric motors, PH-1-N5-SP1-AS-BL and PH-1-N5-SP2-AS-BL;
L. Two dust collector fans with 5-hp electric motors, PH-1-N5-SP1-DF and PH-1-N5-SP2-DF;
M. Two dual axis horizontal spout positioners, PH-1-N5-SP1-POS and PH-1-N5-SP2-POS; and
N. Two telescoping truck loadout spouts, PH-1-N5-SP1 and PH-1-N5-SP2.

**OPERATIONAL CONDITIONS:**

1. Dust collectors serving truck loadout operation shall be equipped with operational differential pressure indicators. (Rule 210.1)
2. Dust collectors serving truck loadout operation shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Visible emissions from all emission points shall be less than 5% opacity. (Rule 210.1 BACT Requirement)
4. Particulate matter emissions from fabric collector exhaust shall not exceed 0.1-gr/scf. (Rule 404.1)
5. Dust collectors shall be in operation when truck loadout system is in operation. (Rule 210.1)
6. Equipment shall be maintained according to manufacturer's specifications, including periodic replacement and/or cleaning of filters, to ensure compliance with emission limitations. (Rule 210.1)
7. All piping, duct work, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
8. Materials collected in dust collectors shall be returned to process. (Rule 210.1)
9. Dust collectors serving storage bin and truck loadout (shipping) operation shall operate whenever associated transfer and loading equipment is in operation. (Rule 210.1)
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)

11. 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 on site and readily available. (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 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 the following emissions limitations:

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Bin Vent Dust Collector (DCL BV25-84): | 0.015 | grains/scf |
| | 0.05 | lb/hr |
| | 1.23 | lb/day |
| | 0.22 | ton/yr |
| PH-1-N5-SP1-DC Dust Collector (DCL CFM-470): | 0.015 | grains/scf |
| | 0.23 | lb/hr |
| | 5.55 | lb/day |
| | 1.01 | ton/year |
| PH-1-N5-SP2-DC Dust Collector (DCL CFM-470): | 0.015 | grains/scf |
| | 0.23 | lb/hr |
| | 5.55 | lb/day |
| | 1.01 | 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 the District for period of three years. (Rules 209 and 210.1)

Emission Unit 074 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **074** | **Compressor** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Compressor, including following equipment:

Compressor driven by 250-bhp Caterpillar C.7 certified Tier 4 diesel fueled piston engine

**OPERATIONAL CONDITIONS:**

1. Engine shall be equipped with turbocharger and aftercooler. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
3. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)
4. Compressor operation shall not exceed 8760 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 (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement and Title 17 CCR §93115.5)
6. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not be more than 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
7. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/ft$^3$ of gas at standard conditions. (Rule 404.1)
8. Permittee shall comply with Rule 427, Section VI (Requirements for Engines 250-bhp or More), Section VII (Monitoring), and Section VIII.B and C (Administrative Requirements, Record keeping and Compliance Testing) for subject diesel piston engine. (Rule 427)
9. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
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. Operating record of this equipment shall be maintained in format approved in writing by District kept for a 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) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1).
12. ied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1).
13. 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 Section 41700)

Emission Unit 074 Permit Conditions

**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:**

Engine shall be tested for compliance with the requirements of District Rule 427.VI.C every 2 years or 8760 of operation (whichever is shorter), in accordance with the approved testing procedures listed in District Rule 427.IX. (Rule 427)

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 209)

**EMISSION LIMITS:**

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

| | | |
|---|---|---|
| **Particulate Matter ($PM_{10}$):** | 0.01 | g/bhp-hr (ATCM Requirement) |
| | 0.01 | lb/hr |
| | 0.13 | lb/day |
| | 0.02 | ton/year |
| **Oxides of Sulfur (SOx as $SO_2$):** | 0.002 | lb/hr |
| | 0.05 | lb/day |
| | 0.01 | ton/year |
| **Oxides of Nitrogen (NOx):** | 1.49 | g/bhp-hr (ATCM Requirement) |
| | 0.82 | lb/hr |
| | 19.71 | lb/day |
| | 3.60 | ton/year |
| **Volatile Organic Compounds (VOC):** | 0.14 | g/bhp-hr (ATCM Requirement) |
| | 0.07 | lb/hr |
| | 1.85 | lb/day |
| | 0.34 | ton/year |
| **Carbon Monoxide (CO):** | 2.6 | g/bhp-hr (ATCM Requirement) |
| | 1.43 | lb/hr |
| | 34.39 | lb/day |
| | 6.28 | ton/year |

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

Emission Unit 074 Permit Conditions

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

**SPECIAL CONDITIONS:**

aa. Upon issuance of Permit to Operate, equipment under Permit No. 1003045 shall be removed from service.

Emission Unit 075 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **075** | **Backup Concrete Batching Operation** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Backup Concrete Batching Operation, including following equipment:

A. Vince Hagan model Haganator HT-Series, 150-$yd^3$/hr concrete batch plant including the following:
   1. Four aggregate storage bins;
   2. Aggregate batcher (10 $yd^3$ batch size);
   3. Two cement silos 112 tons and 45 tons respectively;
   4. Two cement screw conveyors (6" x 20'), each driven by 10-hp electric motors;
   5. Charge belt conveyor (30" x 44') with 15-hp electric motor;
   6. Two cement silo dust collectors equipped with shaker type cleaning mechanism and exhaust fan rated at 168 cfm;
   7. McNeilus model RA1500, central dust collector equipped with reverse air type cleaning mechanism and 20-hp exhaust fan motor rated at 1,500 cfm;
   8. Water pump driven by 15-hp motor;
   9. Air compressor 10-hp.

B. Plant feed -radial stacker (24" x 70') with 15-hp electric motor;
C. Outdoor sand storage piles (shared with PTO 1003070A); and
D. Outdoor aggregate storage piles (shared with PTO 1003070A).

**DESIGN CONDITIONS:**

a. Facility shall have provisions for wetting or covering sand and aggregate stockpiles. (Rule 210.1)
b. Conveyors shall be covered or equipped with water sprays to control visible emissions. (Rule 210.1 BACT Requirement)

**OPERATIONAL CONDITIONS**:

1. Primary concrete batch plant under PTO No. 1003070A and back-up batch plant listed herein shall not operate simultaneously. (Rule 210.1)
2. Concrete production shall not exceed 3,600-$yd^3$ (7,200-ton) per day (averaged on monthly basis). (Rule 210.1)
3. Concrete production shall not exceed 30,000-$yd^3$ (60,000-ton) per year without prior District approval. (Rule 210.1)
4. Visible emissions from baghouse shall not exceed 5% opacity (Ringelmann No. ¼) for more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
5. Visible emissions from concrete batching, sand/aggregate stockpiles, and roadways shall not exceed 10% opacity (Ringelmann No. ½) for more than three minutes in any one-hour. (Rule 210.1)
6. Particulate matter exhaust concentration from fabric collectors (dust collector, bin vent filter) shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
7. Provisions for wetting aggregate shall be utilized to prevent visible dust emissions in excess of 10% opacity. (Rule 210.1)

8. Cement transfer to batch plant mixer shall be completely wind-protected by cover or other enclosure. (Rule 210.1)
9. Water application system shall be available to wet aggregate in delivery trucks prior to unloading. (Rule 210.1 BACT Requirement)
10. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 BACT Requirement)
11. 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 209)
12. 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)

**CONSTRUCTION ACTIVITY:**

All construction phase emissions shall be controlled utilizing reasonably available control provisions, e.g. construction site and unsurfaced roadway dust control, conscientious maintenance of mobile and piston engine-powered equipment, etc.

**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 limitation or concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request and official results shall be submitted within 30 days after test completion. (Rule 108.1)

**EMISSION LIMITS**:

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| Silo 1 (45-ton) Bin Vent: | 0.01 | gr/scf |
| (168-cfm) | 0.014 | lb/hr |
| | 0.346 | lb/day |
| | 0.001 | ton/yr |
| Silo 2 (112-ton) Bin Vent | 0.01 | gr/scf |
| (168-cfm) | 0.014 | lb/hr |
| | 0.346 | lb/day |
| | 0.001 | ton/yr |

| | | |
|---|---|---|
| Truck Loadout Fabric Collector | 0.01 | gr/scf |
| (1,500-cfm) | 0.129 | lb/hr |
| | 3.086 | lb/day |
| | 0.013 | ton/yr |
| Aggregate/Sand Transfer (Batching): | 0.449 | lb/hr |
| | 10.779 | lb/day |
| | 0.045 | ton/yr |

*Emission limits for storage piles listed on PTO No. 1003070A.

(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 209 and 210.1)

Emission Unit 076 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **076** | **Portable Crushing and Screening Plant** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Portable Crushing and Screening Plant, including the following equipment and design specifications:

1. Up to four (4) portable (self-propelled) jaw crushing plants with total rating up to 1,760-bhp and each powered by a diesel fueled engine (permit exempt mobile engine).
2. Up to four (4) self-propelled screening plants with total rating up to 568-bhp and each powered by a diesel fueled engine (permit exempt mobile engine).
3. Up to thirty-three (33) material transfer points including up to eight (8) vibrating grizzlies feeders and twenty-five (25) conveyors including stacking radial conveyors.

**OPERATIONAL CONDITIONS**:

1. Hourly throughput rate for each crusher, screening plant, and transfer point shall not exceed 540 tons/hr. (Rule 210.1)
2. Annual throughput rate for each crusher shall not exceed 648,000 tons/year. (Rule 210.1)
3. Annual throughput rate for each screen shall not exceed 1,000,000 tons/year. (Rule 210.1)
4. Wet suppression shall be used during material loading, screening, conveying, crushing, and transferring, to minimize particulate matter emission resulting from operation. (Rule 210.1)
5. Visible emissions from portable crusher shall not exceed 12% opacity or ¼ Ringelmann for 3 minutes in any one-hour. (Rule 210.1 & Rule 422, 40 CFR Part 60 Subpart OOO)
6. Visible emissions from screening units, conveyors, and storage piles shall not exceed 7% opacity or ¼ Ringelmann for 3 minutes in any one-hour. (Rule 210.1 & Rule 422, 40 CFR Part 60 Subpart OOO)
7. Owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system, and shall initiate corrective action within 24 hours if water is not flowing properly. (Rule 422, 40 CFR Part 60 Subpart OOO)
8. Drop heights shall be kept at a minimum to limit visible emissions. (Rule 209)
9. 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)
10. Particulate matter emissions from any single source shall be no more than 0.1-gr/scf. (Rule 404.1)
11. Storage piles shall be periodically sprayed with water to maintain damp condition of storage piles and to control particulate emissions to atmosphere. (Rules 401 and 402)
12. Storage piles containing sand shall not exceed a footprint of 2.11 acres without prior District approval. (Rule 210.1)
13. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
14. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rules 111 and 422)

15. 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 427)
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)

**SPECIAL CONDITIONS:**

aa. Owner/operator shall notify District at least two (2) days prior to equipment arriving on-site. Owner/operator shall provide equipment make, model, and horsepower rating. (Rule 210.1)
bb. Total equipment rating shall not exceed 2,328-bhp without prior District approval. (Rule 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

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

**EMISSION LIMITS**:

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| **Crushing, Screening, & Material Transfer**: | 11.17 | lb/hr |
| | 268.02 | lb/day |
| | 7.89 | ton/yr |
| **Stockpile Erosion (Fugitive):** | 0.58 | lb/hr |
| | 14.01 | lb/day |
| | 2.56 | 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 documenting 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 209 and 210.1)

Emission Unit 077 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **077** | **Generator Set Driven by 173-bhp Diesel Piston Engine** |

## Emission Unit Equipment Description/Permit Conditions

### Federally Enforceable Conditions

**EQUIPMENT DESCRIPTION:** Generator Set Driven by Diesel Piston Engine, including the following equipment and design specifications:

Generator set, driven by EPA Certified Tier 4, diesel fueled piston engine with turbocharger, after cooler, and rated up to 173-bhp.

**DESIGN CONDITIONS:**

a. Engine shall be equipped with turbocharger and charge air cooler. (Rule 210.1 BACT Requirement)
b. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
c. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)

**OPERATIONAL CONDITIONS**:

1. Total hours of operation shall not exceed 4,200 hours per year without prior District approval. (Rule 210.1)
2. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
3. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not be more than 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
4. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/$ft^3$ of gas at standard conditions. (Rule 404.1)
5. Engine shall comply with applicable requirements specified in the ATCM for stationary diesel-fueled engines. (Title 17, CCR §93115 - 93115.15)
6. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rules 210.1, 423 Subpart ZZZZ)
7. Operation of this equipment shall be conducted in compliance with all data, operating locations, and specifications submitted with application under which this permit is issued. (Rule 210.1)
8. Operating record of this equipment shall be maintained in format approved in writing by District kept for a 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) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1).
9. nd engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1).
10. Permittee shall maintain an engine service log demonstrating compliance with Section V of Rule 427 for at least two years and make such log readily available to District personnel upon request. (Rule 427)
11. In the event that the $NO_x$ minimization maintenance schedule conflicts with a requirement of the manufacturer, defer to the manufacturer's requirement. (Rule 210.1)

12. 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)
13. 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 §41700)

**SPECIAL CONDITIONS:**

aa. Prior to implementation of this Permit to Operate (PTO), applicant shall provide offsets in tons/year for the following amounts ($PM_{10}$: 0.01). This includes the appropriate offset ratio 1.2:1. (Rule 210.1)
bb. Owner/operator shall notify District at least two (2) days prior to equipment arriving on-site. Owner/operator shall provide equipment make, model, and horsepower rating. (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 any emission limitation or concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request and official results shall be submitted within 30 days after test completion. (Rule 108.1)

**EMISSION LIMITS**:

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

| | | |
|---|---|---|
| **Particulate Matter ($PM_{10}$):** | 0.01 | gm/bhp-hr (CARB Certificate) |
| | 0.01 | lb/hr |
| | 0.14 | lb/day |
| | 0.01 | ton/yr |
| **Sulfur Oxides (SOx as $SO_2$):** | 2E-3 | lb/hr |
| | 0.04 | lb/day |
| | 4E-3 | ton/yr |
| **Oxides of Nitrogen (NOx as $NO_2$):** | 0.21 | gm/bhp-hr (CARB Certificate) |
| | 0.08 | lb/hr |
| | 1.91 | lb/day |
| | 0.17 | ton/yr |
| **Volatile Organic Compounds (VOC): (as defined in Rule 210.1)** | 0.01 | gm/bhp-hr (CARB Certificate) |
| | 3E-3 | lb/hr |
| | 0.07 | lb/day |
| | 0.01 | ton/yr |

Emission Unit 077 Permit Conditions

| | | |
|---|---|---|
| **Carbon Monoxide:** | 0.02 | gm/bhp-hr (CARB Certificate) |
| | 0.01 | lb/hr |
| | 0.20 | lb/day |
| | 0.02 | 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 209 and 210.1)

Emission Unit 080 Permit Conditions

| Facility Number | Emissions Unit | Description of Source |
|---|---|---|
| **1003** | **080** | Blast Hole Drilling Rig |

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Blast Hole Drilling Rig #3, including the following equipment and design specifications:

Sandvik D55SP/D75KS Self- Propelled, Blast Hole Drilling Rig, powered by an 800-bhp Caterpillar model C27, EPA certified diesel piston engine (permit exempt mobile engine).

**DESIGN CONDITIONS**:

a. Blast hole drill rig shall be equipped with dust skirt and water injection to minimize drilling dust emission. (Rule 210.1 BACT Requirement)

**OPERATIONAL CONDITIONS**:

1. Combined drilling operation for PTOs 1003064C and 1003080 shall not exceed 133 holes/day and 20,000 holes/year without prior District approval. (Rule 210.1)
2. Drilling shall not take place unless dust control equipment is operational and utilized. (Rule 210.1)
3. Visible Emissions from the process of drilling hole shall not exceed 20% opacity or Ringelmann No. 1 for more than 3 minutes in any one hour (Rule 210.1 BACT Requirement).
4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
5. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
6. 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 or District personnel. Record shall include, at minimum, days and hours of operation
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 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 limitation or concentration emission limits shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request and official results shall be submitted within 30 days after test completion. (Rule 108.1)

**EMISSION LIMITS**:

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

**Particulate Matter ($PM_{10}$):**

| | | |
|---|---|---|
| **Hole Drilling Emissions:** | 1.32 | lb/hr |
| | 31.65 | lb/day |
| | 2.38 | ton/yr |

**Emission limits shared with Permit No. 1003080.*

(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 209 and 210.1)

# FEDERAL REGULATIONS
# 40 CFR 60 SUBPART A
# General Provisions

**Applicable provisions of 40 CFR 60 Subpart A shall apply.**

**[40 FR 53346, Nov. 17, 1975, as amended at 55 FR 51382, Dec. 13, 1990; 59 FR 12427, Mar. 16, 1994; 62 FR 52641, Oct. 8, 1997 ; 88 FR 80542, Nov. 17, 2023]**

## Applicability

| | |
|---|---|
| §60.1(a) | Except as provided in subparts B and C, the provisions of this part apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of any standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. |
| §60.1(b) | Any new or revised standard of performance promulgated pursuant to section 111(b) of the Act shall apply to the owner or operator of any stationary source which contains an affected facility, the construction or modification of which is commenced after the date of publication in this part of such new or revised standard (or, if earlier, the date of publication of any proposed standard) applicable to that facility. |
| §60.1(c) | In addition to complying with the provisions of this part, the owner or operator of an affected facility may be required to obtain an operating permit issued to stationary sources by an authorized State air pollution control agency or by the Administrator of the U.S. Environmental Protection Agency (EPA) pursuant to Title V of the Clean Air Act (Act) as amended November 15, 1990 (42 U.S.C. 7661). For more information about obtaining an operating permit see part 70 of this chapter. |

*Remainder of Page Intentionally Left Blank*

# 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)**

**Applicable provisions of 40 CFR 60 Subpart F shall apply.**

**[75 FR 55034, Sept. 9, 2010, as amended at 78 FR 10032, Feb. 12, 2013; 80 FR 44777, July 27, 2015]**

| | |
|---|---|
| Subject Emission Units Permit Number | All equipment listed in the following permits: 1003004, 1003010, 1003016, 1003017, 1003018, 1003022, 1003023, 1003024, 1003025, 1003026, 1003027, 1003054, 1003055, 1003056, 1003057, 1003058, 1003059, and 1003065. |

## 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:<br><br>1) Contain particulate matter (PM) in excess of:<br><br>(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.<br><br>(2) Exhibit greater than 20 percent opacity for kilns constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008, 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 parametric monitoring system (CPMS). |
| **§60.62(b)(3)** | If the kiln has a separated alkali bypass stack and/or an inline coal mill with a separate stack, you must combine the PM emissions from the bypass stack and/or the inline coal mill stack with the PM emissions from the main kiln exhaust to determine total PM emissions. |

## Monitoring, Testing, Recordkeeping, and Reporting

| | |
|---|---|
| **§60.63(b)** | *Clinker production monitoring requirements.* For any kiln subject to an emissions limitation on PM, $NO_X$, or $SO_2$emissions (lb/ton of clinker), you must: |
| **§60.63(b)(1)** | (1) Determine hourly clinker production by one of two methods:<br><br>(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.<br><br>(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; |

| | |
|---|---|
| | (iii) For each kiln operating hour for which you do not have data on clinker production or the amount of feed to the kiln, use the value from the most recent previous hour for which valid data are available. |
| **§60.63(b)(2)** | Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production rates or feed rates before initial use (for new sources) or by the effective compliance date of this rule (for existing sources). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production rates or feed rates. |
| **§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 $NO_X$ emissions limit in §60.62(a)(3), or the $SO_2$ emissions limit in §60.62(a)(4) according to the requirements in paragraphs (h)(1) through (10) of this section.<br><br>(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 $NO_X$, $SO_2$ 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.<br><br>(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.<br><br>(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate.<br><br>(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.<br><br>(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.<br><br>(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.<br><br>(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).<br><br>(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).<br><br>(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.<br><br>(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).<br><br>(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.<br><br>(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.<br><br>(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).<br><br>(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. |
| **§60.63(i)** | *Development and Submittal (Upon Request) of Monitoring Plans.* 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.<br><br>(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.<br><br>(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);<br><br>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and<br><br>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).<br><br>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.<br><br>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);<br><br>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and<br><br>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).<br><br>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.<br><br>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. |
| **§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)** | **(1)**You must demonstrate compliance with the PM standards in § 60.62 using EPA method 5 or method 5I.<br>**(2)** Use Method 9 and the procedures in § 60.11 to determine opacity.<br>**(3)** Any sources other than kilns (including associated alkali bypass and clinker cooler) that are subject to the 10 percent opacity limit must follow the appropriate monitoring procedures in § 63.1350(f), (m)(1)through (4), (10) and (11), (o), and (p) of this chapter. |
| **§63.1350(m)(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.<br><br>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.<br><br>(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.<br><br>(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.<br><br>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.<br><br>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.<br><br>(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.<br><br>(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.<br><br>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors. |

## Recordkeeping

| | |
|---|---|
| **§60.63(b)(3)** | Record the daily clinker production rates and kiln feed rates. |

## Reporting

| | |
|---|---|
| **§60.64(d)** | **(1)** Within 60 days after the date of completing each performance test (see § 60.8) as required by this subpart you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13.<br>**(2)** Within 60 days after the date of completing each CEMS performance evaluation test as defined in § 63.2, you must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (d)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 63.13.<br>**(3)** For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.<br>**(4)** All reports required by this subpart not subject to the requirements in paragraphs (d)(1) and (2) of this section must be sent to the Administrator at the appropriate address listed in § 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used |

| | |
|---|---|
| | electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (d)(1) and (2) of this section in paper format. |

## 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)(iii)

### 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)** | 1) Contain PM in excess of:<br><br>(iii) 0.10 lb per ton of feed (dry basis) for clinker coolers constructed, reconstructed, or modified after August 17, 1971, but on or before June 16, 2008.<br><br>(iv) 10 percent opacity for clinker coolers constructed, reconstructed, or modified after August 17, 1971, but on or before June 16, 2008, 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 continuous parametric monitoring system (CPMS). |

### Monitoring, Testing, Recordkeeping, and Reporting

| | |
|---|---|
| **§60.63(i)** | *Development and Submittal (Upon Request) of Monitoring Plans.* 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.<br><br>(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.<br><br>(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);<br><br>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and<br><br>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).<br><br>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.<br><br>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);<br><br>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and<br><br>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).<br><br>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan. |

| | |
|---|---|
| | (4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. |
| **§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)** | **(1)**You must demonstrate compliance with the PM standards in § 60.62 using EPA method 5 or method 5I.<br>**(2)** Use Method 9 and the procedures in § 60.11 to determine opacity.<br>**(3)** Any sources other than kilns (including associated alkali bypass and clinker cooler) that are subject to the 10 percent opacity limit must follow the appropriate monitoring procedures in § 63.1350(f), (m)(1)through (4), (10) and (11), (o), and (p) of this chapter. |
| **§63.1350(m)(10)** | *Parameter monitoring requirements.* 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.<br><br>(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.<br><br>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.<br><br>(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.<br><br>(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.<br><br>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.<br><br>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.<br><br>(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.<br><br>(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.<br><br>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors. |

## Reporting

| | |
|---|---|
| **§60.64(d)** | **(1)** Within 60 days after the date of completing each performance test (see § 60.8) as required by this subpart you must submit the results of the performance tests conducted to demonstrate compliance under this subpart to the EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. Owners or operators who |

| | |
|---|---|
| | claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk, flash drive or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to the EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the CBI, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 63.13.<br>**(2)** Within 60 days after the date of completing each CEMS performance evaluation test as defined in § 63.2, you must submit relative accuracy test audit (RATA) data to the EPA's CDX by using CEDRI in accordance with paragraph (d)(1) of this section. Only RATA pollutants that can be documented with the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 63.13.<br>**(3)** For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.<br>**(4)** All reports required by this subpart not subject to the requirements in paragraphs (d)(1) and (2) of this section must be sent to the Administrator at the appropriate address listed in § 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to paragraph (d)(1) and (2) of this section in paper format. |

## 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)** | *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. |

### 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)(2)** | Method 9 and the procedures in §60.11 must be used to determine opacity. |
| **§60.64(b)(3)** | 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)** | *Opacity monitoring requirements.* 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. |
| **§63.1350(f)(1)(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. |
| **§63.1350(f)(1)(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. |
| **§63.1350(f)(1)(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. |
| **§63.1350(f)(1)(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. |
| **§63.1350(f)(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. |
| **§63.1350(f)(2)(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. |
| **§63.1350(f)(2)(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. |
| **§63.1350(f)(3)** | If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (2) of this section, you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan as required in § 63.1347. |
| **§63.1350(f)(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). |
| **§63.1350(f)(4)(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. |
| **§63.1350(f)(4)(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. |
| **§63.1350(m)** | *Parameter monitoring requirements.* 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. |
| **§63.1350(m)(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. |
| **§63.1350(m)(2)** | You must conduct all monitoring in continuous operation at all times that the unit is operating. |
| **§63.1350(m)(3)** | Determine the 3-hour block average of all recorded readings. |
| **§63.1350(m)(4)** | Record the results of each inspection, calibration, and validation check. |
| **§63.1350(m)(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.<br><br>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.<br><br>(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.<br><br>(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.<br><br>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.<br><br>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.<br><br>(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.<br><br>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors. |
| **§63.1350(m)(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:<br><br>(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;<br><br>(ii) Sealing off defective bags or filter media;<br><br>(iii) Replacing defective bags or filter media or otherwise repairing the control device;<br><br>(iv) Sealing off a defective fabric filter compartment;<br><br>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or<br><br>(vi) Shutting down the process producing the PM emissions. |
| **§63.1350(o)** | *Alternate monitoring requirements approval.* You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (o)(1) through (o)(6) of this section. |
| **§63.1350(o)(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. |
| **§63.1350(o)(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 (o)(3)(i) through (iii) of this section:<br><br>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;<br><br>(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<br><br>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard. |
| **§63.1350(p)** | *Development and submittal (upon request) of monitoring plans*. 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. |
| **§63.1350(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. |

| | |
|---|---|
| | (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);<br><br>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and<br><br>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations). |
| **§63.1350(p)(2)** | In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.<br><br>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);<br><br>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and<br><br>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i). |
| **§63.1350(p)(3)** | You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan. |

| | |
|---|---|
| **§63.1350(p)(4)** | You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. |
| **§63.1350(p)(5)** | *BLDS monitoring plan*. 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;<br>(i) Installation of the BLDS;<br><br>(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;<br><br>(iii) Operation of the BLDS, including quality assurance procedures;<br><br>(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;<br><br>(v) How the BLDS output will be recorded and stored. |

*Remainder of Page Intentionally Left Blank*

# 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: 1003010. |

**Standards for thermal dryers**

| | |
|---|---|
| **§60.252(a)** | 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. |
| **§60.252(a)(1)** | 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 |
| **§60.252(a)(2)** | 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. |
| **§60.252(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 ($SO_2$), and combined nitrogen oxides ($NO_x$) and carbon monoxide (CO) as specified in paragraphs (b)(2) and (b)(3) of this section. |
| **§60.252(b)(1)** | 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.<br><br>(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).<br><br>(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<br><br>(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.<br><br>(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.<br><br>(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<br><br>(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. |

| | |
|---|---|
| **§60.252(b)(2)** | 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 $SO_2$ emissions in either paragraph (b)(2)(i) or (b)(2)(ii) of this section.<br><br>(i) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that contain $SO_2$ in excess of 85 ng/J (0.20 lb/MMBtu) heat input; or<br><br>(ii) The owner or operator must not cause to be discharged into the atmosphere from the affected facility any gases that either contain $SO_2$ in excess of 520 ng/J (1.20 lb/MMBtu) heat input or contain $SO_2$ in excess of 10 percent of the potential combustion concentration (*i.e.*, 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)).<br><br>(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 $SO_2$ 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 $SO_2$ limits of this section. |
| **§60.252(b)(3)** | Except as provided in paragraph (b)(3)(iii) of this section, the owner or operator must meet the requirements for combined $NO_x$ and CO emissions in paragraph (b)(3)(i) or (b)(3)(ii) of this section, as applicable to the affected facility.<br><br>(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 $NO_x$ and CO in excess of 280 ng/J (0.65 lb/MMBtu) heat input.<br><br>(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 $NO_x$ and CO in excess of 430 ng/J (1.0 lb/MMBtu) heat input.<br><br>(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 $NO_x$ 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 $NO_x$ and CO limits of this section. |
| **§60.252(c)** | 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. |

## Standards for Pneumatic Coal-cleaning Equipment

| | |
|---|---|
| **§60.253(a)** | 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.<br><br>(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<br><br>(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. |

| | |
|---|---|
| **§60.253(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 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.<br><br>(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coal-cleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and<br><br>(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. |

## Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.

| | |
|---|---|
| **§60.254(a)** | 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. |
| **§60.254(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 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.<br><br>(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.<br><br>(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).<br><br>(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. |
| **§60.254(c)** | 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. |
| **§60.254(c)(1)** | 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. |
| **§60.254(c)(2)** | 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. |

| | |
|---|---|
| **§60.254(c)(3)** | 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.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(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. |
| **§60.254(c)(4)** | 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.<br><br>(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.<br><br>(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. |
| **§60.254(c)(5)** | 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.<br><br>(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.<br><br>(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. |

| | |
|---|---|
| **§60.254(c)(6)** | 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. |

## Performance Tests and Other Compliance Requirements

| | |
|---|---|
| **§60.255(a)** | 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. |
| **§60.255(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. |
| **§60.255(b)(1)** | For each affected facility subject to a PM, $SO_2$, or combined $NO_x$ and CO emissions standard, an initial performance test must be performed. Thereafter, a new performance test must be conducted according the requirements in paragraphs (b)(1)(i) through (iii) of this section, as applicable.<br><br>(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.<br><br>(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.<br><br>(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. |
| **§60.255(b)(2)** | 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.<br><br>(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.<br><br>(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.<br><br>(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. |
| **§60.255(c)** | If any affected coal processing and conveying equipment (*e.g.*, breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems that commenced construction, |

| | |
|---|---|
| | 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. |
| **§60.255(d)** | 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.<br><br>(1) PM emissions, as determined by the most recent performance test, are less than or equal to the applicable limit,<br><br>(2) The control device manufacturer's recommended maintenance procedures are followed, and<br><br>(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. |
| **§60.255(e)** | 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.<br><br>(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;<br><br>(2) The manufacturer's recommended maintenance procedures are followed for each control device; and<br><br>(3) A performance test is conducted on each affected facility at least once every 5 calendar years. |
| **§60.255(f)** | 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. |
| **§60.255(f)(1)** | Monitor visible emissions from each affected facility according to the requirements in paragraphs (f)(1)(i) through (iii) of this section.<br><br>(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.<br><br>(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.<br><br>(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. |

| | |
|---|---|
| **§60.255(f)(2)** | 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, *see* 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. |
| **§60.255(g)** | 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. |
| **§60.255(g)(1)** | The COMS must meet Performance Specification 1 in 40 CFR part 60, appendix B. |
| **§60.255(g)(2)** | The COMS must comply with the quality assurance requirements in paragraphs (g)(2)(i) through (v) of this section.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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. |
| **§60.255(h)** | 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. |

| | |
|---|---|
| **§60.255(h)(1)** | 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).<br><br>(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.<br><br>(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. |
| **§60.255(h)(2)** | 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. |
| **§60.255(h)(3)** | 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. |

## Continuous Monitoring Requirements

| | |
|---|---|
| **§60.256(a)** | 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. |
| **§60.256(a)(1)** | The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:<br><br>(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 ±1.7 °C (±3 °F).<br><br>(ii) For affected facilities that use wet scrubber emission control equipment:<br><br>(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 ±1 inch water gauge.<br><br>(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 ±5 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. |
| **§60.256(a)(2)** | All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b). |
| **§60.256(b)** | 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. |
| **§60.256(b)(1)** | 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. |

| | |
|---|---|
| **§60.256(b)(2)** | For mechanical vents with wet scrubbers, monitoring devices according to the requirements in paragraphs (b)(2)(i) through (iv) of this section.<br><br>(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 ±1 inch water gauge.<br><br>(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 ±5 percent of design water supply flow rate.<br><br>(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 ±5 percent of design pH.<br><br>(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. |
| **§60.256(b)(3)** | 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 ±5 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. |
| **§60.256(c)** | 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. |
| **§60.256(c)(1)** | The bag leak detection system must meet the specifications and requirements in paragraphs (c)(1)(i) through (viii) of this section.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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 (c)(2) of this section.<br><br>(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.<br><br>(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. |
| **§60.256(c)(2)** | 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.<br><br>(i) Installation of the bag leak detection system;<br><br>(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;<br><br>(iii) Operation of the bag leak detection system, including quality assurance procedures;<br><br>(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list;<br><br>(v) How the bag leak detection system output will be recorded and stored; and<br><br>(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. |
| **§60.256(c)(3)** | 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:<br><br>(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;<br><br>(ii) Sealing off defective bags or filter media;<br><br>(iii) Replacing defective bags or filter media or otherwise repairing the control device;<br><br>(iv) Sealing off a defective fabric filter compartment;<br><br>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or<br><br>(vi) Shutting down the process producing the PM emissions. |

## Test Methods and Procedures

| | |
|---|---|
| **§60.257(a)** | The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section. |
| **§60.257(a)(1)** | 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).<br><br>(i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).<br><br>(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. |
| **§60.257(a)(2)** | To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.<br><br>(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.<br><br>(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.<br><br>(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. |
| **§60.257(a)(3)** | 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.<br><br>(i) No more than three emissions points may be read concurrently.<br><br>(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.<br><br>(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. |
| **§60.257(b)** | 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.<br><br>(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.<br><br>(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.<br><br>(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 |

| | |
|---|---|
| | Analyses (incorporated by reference—*see* §60.17) as an alternative to Method 3B of appendix A-2 of this part.<br><br>(4) Method 4 of appendix A-4 of this part shall be used to determine the moisture content of the stack gas.<br><br>(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:<br><br>(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.<br><br>(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.<br><br>(iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.<br><br>(iv) Method 5D of appendix A-4 of this part shall be used for positive pressure fabric filters and other similar applications (*e.g.*, stub stacks and roof vents).<br><br>(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.<br><br>(6) Method 6, 6A, or 6C of appendix A-4 of this part shall be used to determine the $SO_2$ concentration. A minimum of three valid test runs are needed to comprise an $SO_2$ performance test.<br><br>(7) Method 7 or 7E of appendix A-4 of this part shall be used to determine the $NO_x$ concentration. A minimum of three valid test runs are needed to comprise an $NO_x$ performance test.<br><br>(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 $NO_x$ performance tests. |

## Reporting and Recordkeeping

| | |
|---|---|
| **§60.258(a)** | 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:<br><br>(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.<br><br>(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.<br><br>(3) The amount and type of coal processed each calendar month. |

| | |
|---|---|
| | (4) The amount of chemical stabilizer or water purchased for use in coal preparation and processing plant.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(i) Records of the bag leak detection system output;<br><br>(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<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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. |
| **§60.258(b)** | 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:<br><br>(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.<br><br>(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.<br><br>(3) All 6-minute average opacities that exceed the applicable standard. |
| **§60.258(c)** | 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. |

| | |
|---|---|
| **§60.258(d)** | 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 *http://cfpub.epa.gov/oarweb/index.cfm?action = fire.main.* For performance tests that cannot be entered into WebFIRE (*i.e.*, Method 9 of appendix A-4 of 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. |

*Remainder of Page Intentionally Left Blank*

# 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: 1003001, 1003061, and 1003076. |

## Applicability and Designation of Affected Facility

| | |
|---|---|
| **§60.670** | (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.<br><br>(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).<br><br>(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.<br><br>(c) Facilities at the following plants are not subject to the provisions of this subpart:<br><br>(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;<br><br>(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<br><br>(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.<br><br>(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.<br><br>(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).<br><br>(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.<br><br>(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. |

| | |
|---|---|
| | (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. |

## Standard for Particulate Matter (PM)

| | |
|---|---|
| **§60.672** | (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.<br><br>(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.<br><br>(c) [Reserved]<br><br>(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.<br><br>(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:<br><br>(1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and<br><br>(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.<br><br>(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. |

## Reconstruction

| | |
|---|---|
| **§60.673** | (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.<br><br>(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. |

## Monitoring of Operations

| | |
|---|---|
| **§60.674(a)** | 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:<br><br>(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 ±250 pascals ±1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.<br><br>(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 ±5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions. |
| **§60.674(b)** | 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 expediently 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).<br><br>(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:<br><br>(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<br><br>(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.<br><br>(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. |
| **§60.674(c)** | 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. |

| | |
|---|---|
| **§60.674(d)** | 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. |
| **§60.674(d)(1)** | Each bag leak detection system must meet the specifications and requirements in paragraphs (d)(1)(i) through (viii) of this section.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.<br><br>(viii) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors. |
| **§60.674(d)(2)** | 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.<br><br>(i) Installation of the bag leak detection system;<br><br>(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;<br><br>(iii) Operation of the bag leak detection system, including quality assurance procedures;<br><br>(iv) How the bag leak detection system will be maintained, including a routine maintenance schedule and spare parts inventory list; |

| | |
|---|---|
| | (v) How the bag leak detection system output will be recorded and stored; and<br><br>(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. |
| **§60.674(d)(3)** | 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:<br><br>(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;<br><br>(ii) Sealing off defective bags or filter media;<br><br>(iii) Replacing defective bags or filter media or otherwise repairing the control device;<br><br>(iv) Sealing off a defective fabric filter compartment;<br><br>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or<br><br>(vi) Shutting down the process producing the PM emissions. |
| **§60.674(e)** | 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. |

## Test Methods and Procedures

| | |
|---|---|
| **§60.675(a)** | 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. |
| **§60.675(b)** | The owner or operator shall determine compliance with the PM standards in §60.672(a) as follows:<br><br>(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.<br><br>(2) Method 9 of Appendix A-4 of this part and the procedures in §60.11 shall be used to determine opacity. |

| | |
|---|---|
| **§60.675(c)** | (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:<br><br>(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).<br><br>(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.*, 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.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(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. |
| **§60.675(d)** | 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.<br><br>(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.<br><br>(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). |
| **§60.675(e)(1)** | The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:<br><br>(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:<br><br>(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. |

| | |
|---|---|
| | (ii) Separate the emissions so that the opacity of emissions from each affected facility can be read. |
| **§60.675(e)(2)** | 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:<br><br>(i) No more than three emission points may be read concurrently.<br><br>(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.<br><br>(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. |
| **§60.675(e)(3)** | 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. |
| **§60.675(e)(4)** | 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.e.*, velocity head <1.3 mm $H_2O$ (0.05 in. $H_2O$)] 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 (*e.g.*, 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.<br><br>$$v_e = \frac{Q_f}{A_e} \qquad (Eq\ 1)$$<br><br>Where:<br><br>$V_e$ = average building vent velocity (feet per minute);<br><br>$Q_f$ = average fan flow rate (cubic feet per minute); and<br><br>$A_e$ = area of building vent and measurement location (square feet). |
| **§60.675(f)** | 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. |
| **§60.675(g)** | 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. |
| **§60.675(h)** | [Reserved] |
| **§60.675(i)** | 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. |

## Reporting and Recordkeeping

| | |
|---|---|
| **§60.676(a)** | 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.<br><br>(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:<br><br>(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and<br><br>(ii) The rated capacity in tons per hour of the replacement equipment.<br><br>(2) For a screening operation:<br><br>(i) The total surface area of the top screen of the existing screening operation being replaced and<br><br>(ii) The total surface area of the top screen of the replacement screening operation.<br><br>(3) For a conveyor belt:<br><br>(i) The width of the existing belt being replaced and<br><br>(ii) The width of the replacement conveyor belt.<br><br>(4) For a storage bin:<br><br>(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and<br><br>(ii) The rated capacity in megagrams or tons of replacement storage bins. |
| **§60.676(b)(1)** | (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. |
| **§60.676(b)(2)** | 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.<br><br>(i) Records of the bag leak detection system output;<br><br>(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<br><br>(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. |
| **§60.676(b)(3)** | 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. |

| | |
|---|---|
| **§60.676(c)** | 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. |
| **§60.676(d)** | 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. |
| **§60.676(e)** | The reports required under paragraph (d) of this section shall be postmarked within 30 days following end of the second and fourth calendar quarters. |
| **§60.676(f)** | 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). |
| **§60.676(g)** | 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. |
| **§60.676(h)** | 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. |
| **§60.676(i)** | A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.<br><br>(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.<br><br>(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. |
| **§60.676(j)** | 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. |
| **§60.676(k)** | 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)[a] | 7 percent for dry control devices[b] | 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)[a] | Not applicable (except for individual enclosed storage bins)<br>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). |

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

[b]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

| For * * * | 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) * * * | The owner or operator must meet the following fugitive emissions limit for crushers at which a capture system is not used * * * | 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 | 10 percent opacity | 15 percent opacity | An initial performance test according to §60.11 of this part and §60.675 of this subpart. |
| Affected facilities (as defined in §§60.670 and 60.671) that commence construction, modification, or reconstruction on or after April 22, 2008 | 7 percent opacity | 12 percent opacity | An initial performance test according to §60.11 of this part and §60.675 of this subpart; and<br>Periodic inspections of water sprays according to §60.674(b) and §60.676(b); and |
| | | | 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. |

# 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

| | |
|---|---|
| **§61.140** | The provisions of this subpart are applicable to those sources specified in §§61.142 through 61.151, 61.154, and 61.155. |

## Standard for Roadways

| | |
|---|---|
| **§61.143** | No person may construct or maintain a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless, for asbestos tailings.<br><br>(a) It is a temporary roadway on an area of asbestos ore deposits (asbestos mine): or<br><br>(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<br><br>(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. |

## Standard for Demolition and Renovation

| | |
|---|---|
| **§61.145(a)** | (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: |
| **§61.145(a)(1)** | (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<br><br>(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<br>(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously. |

| | |
|---|---|
| **§61.145(a)(2)** | (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<br><br>(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<br><br>(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.<br><br>(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.<br><br>(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<br><br>(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<br><br>(ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.<br><br>(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.<br><br>(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.<br><br>(5) Owners or operators of demolition and renovation operations are exempt from the requirements of §§61.05(a), 61.07, and 61.09. |
| **§61.145(b)** | **Notification Requirements**<br><br>(b)Each owner or operator of a demolition or renovation activity to which this section applies shall:<br><br>(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.<br><br>(2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.<br><br>(3) Postmark or deliver the notice as follows:<br><br>(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. |

| | |
|---|---|
| **§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.<br><br>(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.<br><br>(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:<br><br>(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,<br><br>(*1*) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and<br><br>(*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.<br><br>(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,<br><br>(*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.<br><br>(*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.<br><br>(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.<br><br>(4) Include the following in the notice:<br><br>(i) An indication of whether the notice is the original or a revised notification.<br><br>(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.<br><br>(iii) Type of operation: demolition or renovation.<br><br>(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.<br><br>(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM. |

| | |
|---|---|
| **§61.145(b)** | (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.<br><br>(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.<br><br>(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.<br><br>(ix) Scheduled starting and completion dates of demolition or renovation.<br><br>(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.<br><br>(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.<br><br>(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(xvii) Name, address, and telephone number of the waste transporter.<br><br>(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3. |

| | |
|---|---|
| **§61.145(c)** | **Procedures for Asbestos Emission Control.**<br><br>(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:<br><br>(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:<br><br>(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.<br><br>(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<br><br>(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.<br><br>(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.<br><br>(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:<br><br>(i) Adequately wet all RACM exposed during cutting or disjoining operations; and<br><br>(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.<br><br>(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.<br><br>(i) In renovation operations, wetting is not required if:<br><br>(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<br><br>(B) The owner or operator uses of the following emission control methods:<br><br>(*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.<br><br>(*2*) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.<br><br>(*3*) Leak-tight wrapping to contain all RACM prior to dismantlement. |

| | |
|---|---|
| **§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.<br><br>(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.<br><br>(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:<br><br>(i) Adequately wet the RACM during stripping; or<br><br>(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.<br><br>(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:<br><br>(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.<br><br>(ii) The component is encased in a leak-tight wrapping.<br><br>(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.<br><br>(6) For all RACM, including material that has been removed or stripped:<br><br>(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<br><br>(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.<br><br>(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.<br><br>(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.<br><br>(7) When the temperature at the point of wetting is below 0 °C (32 °F):<br><br>(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.<br><br>(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. |

| | |
|---|---|
| **§61.145(c)** | (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.<br><br>(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.<br><br>(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.<br><br>(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. |

## Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations

| | |
|---|---|
| **§61.150** | 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:<br><br>(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.<br><br>(1) Adequately wet asbestos-containing waste material as follows:<br><br>(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and<br><br>(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<br><br>(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 |

| | |
|---|---|
| **§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.<br><br>(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.<br><br>(2) Process asbestos-containing waste material into nonfriable forms as follows:<br><br>(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;<br><br>(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.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:<br><br>(1) A waste disposal site operated in accordance with the provisions of §61.154, or<br><br>(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.<br><br>(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.<br><br>(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).<br><br>(d) For all asbestos-containing waste material transported off the facility site:<br><br>(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:<br><br>(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.<br><br>(iii) The approximate quantity in cubic meters (cubic yards).<br><br>(iv) The name and telephone number of the disposal site operator.<br><br>(v) The name and physical site location of the disposal site.<br><br>(vi) The date transported.<br><br>(vii) The name, address, and telephone number of the transporter(s).<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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:<br><br>(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and<br><br>(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.<br><br>(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.<br><br>(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section. |

## Air Cleaning

| | |
|---|---|
| **§61.152** | (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)(*1*), 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:<br><br>(1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:<br><br>(i) Ensuring that the airflow permeability, as determined by ASTM Method D737-75, does not exceed 9 $m^3/min/m^2$ (30 $ft^3/min/ft^2$) for woven fabrics or $11^3/min/m^2$(35 $ft^3/min/ft^2$) for felted fabrics, except that 12 $m^3/min/m^2$ (40 $ft^3min/ft^2$) for woven and 14 $m^3/min/m^2$ (45 ft $^3min/ft^2$) for felted fabrics is allowed for filtering air from asbestos ore dryers; and<br><br>(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<br><br>(iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.<br><br>(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.<br><br>(3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.<br><br>(b) There are the following exceptions to paragraph (a)(1):<br><br>(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).<br><br>(2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.<br><br>(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. |

## Reporting

| | |
|---|---|
| **§61.153** | (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. |

| | |
|---|---|
| **§61.153** | (1) A description of the emission control equipment used for each process; and<br><br>(i) If the fabric device uses a woven fabric, the airflow permeability in $m^3/min/m^2$ and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and<br><br>(ii) If the fabric filter device uses a felted fabric, the density in $g/m^2$, the minimum thickness in inches, and the airflow permeability in $m^3/min/m^2$.<br><br>(2) If a fabric filter device is used to control emissions,<br><br>(i) The airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$) 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<br><br>(ii) If the fabric filter device uses a felted fabric, the density in $g/m^2$ ($oz/yd^2$), the minimum thickness in millimeters (inches), and the airflow permeability in $m^3/min/m^2$ ($ft^3/min/ft^2$).<br><br>(3) If a HEPA filter is used to control emissions, the certified efficiency.<br><br>(4) For sources subject to §§61.149 and 61.150:<br><br>(i) A brief description of each process that generates asbestos-containing waste material; and<br><br>(ii) The average volume of asbestos-containing waste material disposed of, measured in $m^3$/day ($yd^3$/day); and<br><br>(iii) The emission control methods used in all stages of waste disposal; and<br><br>(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.<br><br>(5) For sources subject to §§61.151 and 61.154:<br><br>(i) A brief description of the site; and<br><br>(ii) The method or methods used to comply with the standard, or alternative procedures to be used.<br><br>(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. |

*Remainder of Page Intentionally Left Blank*

# FEDERAL REGULATIONS
# 40 CFR 63 SUBPART A
# General Provisions

**Applicable provisions of 40 CFR 63 Subpart A shall apply.**

**[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]**

## Applicability

| | |
|---|---|
| §63.1(a) | *General.* (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.<br><br>(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.<br><br>(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.<br><br>(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.<br><br>(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.<br><br>(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.<br><br>(5) [Reserved]<br><br>(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act, contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.<br><br>(7)-(9) [Reserved] |

| | |
|---|---|
| §63.1(a) | (10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.<br><br>(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.<br><br>(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in §63.9(i). |
| §63.1(b) | (b) *Initial applicability determination for this part.* (1) The provisions of this part apply to the owner or operator of any stationary source that—<br><br>(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and<br><br>(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.<br><br>(2) [Reserved]<br><br>(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in §63.10(b)(3). |
| §63.1(c) | (c) *Applicability of this part after a relevant standard has been set under this part.* (1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.<br><br>(2) Except as provided in §63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether—<br><br>(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);<br><br>(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or |

| | |
|---|---|
| §63.1(c) | (iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.<br><br>(3)-(4) [Reserved]<br><br>(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart. |
| §§63.1(e) | (e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program. |

*Remainder of Page Intentionally Left Blank*

# 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: 1003004, 1003010, 1003016, 1003017, 1003018, 1003022, 1003023, 1003024, 1003025, 1003026, 1003027, 1003054, 1003055, 1003056, 1003057, 1003058, 1003059, and 1003065 |

### Sources with multiple emission limits or monitoring requirements. 40 CFR § 63.1356

| | |
|---|---|
| **§63.1356** | 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. |

### Compliance Dates. § 63.1351

| | |
|---|---|
| **§63.1351** | (a) The compliance date for any affected existing source subject to any rule requirements that were in effect before December 20, 2006, is:<br><br>(1) June 14, 2002, for sources that commenced construction before or on March 24, 1998.<br><br>(c) The compliance date for existing sources for all the requirements that became effective on November 8, 2010 will be September 9, 2013. |

### Affirmative defense for exceedance of emission limit during malfunction. § 63.1344

| | |
|---|---|
| **§63.1344** | 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.<br><br>(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:<br><br>(1) The excess emissions:<br><br>(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<br><br>(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and<br><br>(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and<br><br>(iv) Were not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and<br><br>(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<br><br>(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<br><br>(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<br><br>(5) All possible steps were taken to minimize the impact of the excess emissions on ambient air quality, the environment and human health; and<br><br>(6) All emissions monitoring and control systems were kept in operation if at all possible; and<br><br>(7) Your actions in response to the excess emissions were documented by properly signed, contemporaneous operating logs; and<br><br>(8) At all times, the facility was operated in a manner consistent with good practices for minimizing emissions; and<br><br>(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.<br><br>(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. |

## Parts of plant included in subpart LLL. § 63.1340

| | |
|---|---|
| **§63.1340(a)** | 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. |
| **§63.1340(b)** | The affected sources subject to this subpart are:<br><br>(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;<br><br>(2) Each clinker cooler at any portland cement plant;<br><br>(3) Each raw mill at any portland cement plant;<br><br>(4) Each finish mill at any portland cement plant;<br><br>(5) Each raw material dryer at any portland cement plant;<br><br>(6) Each raw material, clinker, or finished product storage bin at any portland cement plant;<br><br>(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;<br><br>(8) Each bagging and bulk loading and unloading system at any portland cement plant; and |

| | |
|---|---|
| | (9) Each open clinker pile at any portland cement plant. |
| **§63.1340(c)** | Crushers are not covered by this subpart regardless of their location. |
| **§63.1340(d)** | If you are subject to any of the provisions of this subpart you are also subject to title V permitting requirements. |
| **§63.1342** | 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.<br>63.1(a)(1)-(4), (6)-(8), (10)-(14); 63.1(b)(2)-(3); 63.1(c)(1), (2), (4)-(5); 63.1(e);<br>63.2;<br>63.3(a)-(c);<br>63.4(a)(1)-(3), (5); 63.4(b)-(c);<br>63.5(a)(1)-(2); 63.5(b)(1), (3)-(6); 63.5(d)(1)-(4); 63.5(e); 63.5(f)(1)-(2);<br>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);<br>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);<br>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);<br>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);<br>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)<br>63.12(a)-(c)<br>63.13(a)-(c)<br>63.14(a)-(b)<br>63.15(a)-(b) |
| **§63.1343(a)** | (a) General. The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, raw material dryer, and open clinker storage pile. All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. You must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means all operating hours within 30 consecutive kiln operating days excluding periods of startup and shutdown. All emissions limits for kilns, clinker coolers, and raw material dryers currently in effect that are superseded by the limits below continue to apply until the compliance date of the limits below, or until the source certifies compliance with the limits below, whichever is earlier. |

*Remainder of Page Intentionally Left Blank*

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

**§63.1343(b)(1)**

*Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.* The emission limits for these sources are shown in table 1 below.

**§63.1343(b)(1) Table 1**

**Table 1—Emissions Limits for Kilns (Rows 1 and 3), Clinker Coolers (Rows 9 and 10), Raw Material Dryers (Rows 13 and 14)**

| | If your source is | And the operating mode is: | And if is located | Your emissions limits are: | And the units of the emissions limit are: | The oxygen correction factor is: |
|---|---|---|---|---|---|---|
| 1. | An existing kiln | Normal operation | At an area source | PM—0.07<br>D/F—0.2[1]<br>Mercury—55<br>THC—24[2,3] | lb/ton clinker<br>ng/dscm (TEQ)<br>lb/MM tons clinker<br>ppmvd | NA.<br>7 percent.<br>NA.<br>7 percent. |
| 3. | An existing kiln | Startup and shutdown | At an area source | Work practices (63.1346(g)) | NA. | NA. |
| 7. | An existing clinker cooler | Normal operation | At an area source | PM—0.07 | lb/ton clinker | NA. |
| 8. | An existing clinker cooler | Startup and shutdown | At an area source | Work practices (63.1348(b)(9)) | NA. | NA. |
| 11. | An existing or new raw material dryer | Normal operation | At an area source | THC—24[2,3] | ppmvd | NA. |
| 12. | An existing or new raw material dryer | Startup and shutdown | At an area source | Work practices (63.1348(b)(9)) | NA | NA. |

[1] The initial and subsequent PM performance tests are performed using Method 5 or 5I and consist of three test runs.

[2] If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less, this limit is changed to 0.40 ng/dscm (TEQ).
[3] Measured as propane.
[4] Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd for total organic HAP.

**§63.1343(b)(2)**

When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the combined PM emissions from the kiln and the alkali bypass stack and/or the inline coal mill stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust and/or alkali bypass and/or coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using Equation 1 of this section:

$$PM_{alt} = (0.0060 \times 1.65)\,(Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000)\,(\text{Eq. 1})$$

Where:
$PM^{alt}$ = Alternative PM emission limit for commingled sources.
0.006 = The PM exhaust concentration (gr/dscf) equivalent to 0.070 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.
1.65 = The conversion factor of ton feed per ton clinker.
$Q^k$ = The exhaust flow of the kiln (dscf/ton feed).
$Q^c$ = The exhaust flow of the clinker cooler (dscf/ton feed).
$Q^{ab}$ = The exhaust flow of the alkali bypass (dscf/ton feed).
$Q^{cm}$ = The exhaust flow of the coal mill (dscf/ton feed).
7000 = The conversion factor for grains (gr) per lb.

**§63.1343(c)**

The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (see § 63.1347 of this

| | |
|---|---|
| | subpart), that is appropriate for the site conditions as specified in paragraphs (c)(1) through (3) of this section. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.<br>(1) The operation and maintenance plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the owner or operator will use to minimize fugitive dust emissions from each open clinker storage pile.<br>(2) For open clinker storage piles, the operations and maintenance plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents, use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. You must select, for inclusion in the operations and maintenance plan, the fugitive dust control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.<br>(3) Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days. |

## 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

| | |
|---|---|
| **§63.1345** | 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. |

## Operating limits for kilns. §63.1346

| | |
|---|---|
| **§63.1346(a)** | 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:<br><br>(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.<br><br>(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.<br><br>(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. |

| | |
|---|---|
| **§63.1346(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). |

## Operation and maintenance plan requirements. §63.1347

| | |
|---|---|
| **§63.1347(a)** | You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:<br><br>(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;<br><br>(2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);<br><br>(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. |
| **§63.1347(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

| | |
|---|---|
| **§63.1348(a)** | *Initial Performance Test Requirements.* 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. Any affected source that was unable to demonstrate compliance before the compliance date due to being idled, or that had demonstrated compliance but was idled during the normal window for the next compliance test, must demonstrate compliance within 180 days after coming out of the idle period. Any cement kiln that has been subject to the requirements of subpart CCCC or subpart DDDD of 40 CFR Part 60, and is now electing to cease burning nonhazardous solid waste and become subject to this subpart, must meet all the initial compliance testing requirements each time it becomes subject to this subpart, even if it was previously subject to this subpart.<br><br>(1) *PM compliance.* 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).<br><br>(2) *Opacity compliance.* 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.<br><br>(3) *D/F compliance.*<br>(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. Determine the D/F TEQ concentration for each run and calculate the arithmetic average of the TEQ concentrations measured for the three runs to determine continuous compliance. entrations measured for the three runs to determine continuous compliance.<br><br>(ii) If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance with the temperature operating limits specified in § 63.1346 by using the performance test methods and procedures in § 63.1349(b)(3)(ii) through (b)(3)(iv). Use the arithmetic average of the temperatures measured during the three runs to determine the applicable temperature limit.<br><br>(iii) If activated carbon injection is used and you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance with the activated carbon injection rate operating limits specified in § 63.1346 by using the performance test methods and procedures in § 63.1349(b)(3)(v).<br>(iv) If activated carbon injection is used, you must also develop a carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) during the initial performance test and updated during any |

| | |
|---|---|
| | subsequent performance test conducted under § 63.1349(b)(3) that meets the requirements of § 63.1349(b)(3)(vi). Compliance is demonstrated if the system is maintained within ±5 percent accuracy during the performance test determined in accordance with the procedures and criteria submitted for review in your monitoring plan required in § 63.1350(p).<br><br>(4)<br>(i) *THC Compliance.* If you are subject to limitations on THC emissions under § 63.1343(b), you must demonstrate compliance with the THC emissions standards by using the performance test methods and procedures in § 63.1349(b)(4)(i). You must use the average THC concentration obtained during the first 30 kiln operating days after the compliance date of this rule to determine initial compliance.<br>(ii) *Total Organic HAP Emissions Tests.* 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 compliance with the total organic HAP emissions standards by using the performance test methods and procedures in § 63.1349(b)(7).<br>(iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in § 63.1349(b)(7) while the raw mill of the inline kiln/raw mill is operating and while the raw mill of the inline kiln/raw mill is not operating.<br>(iv) The time weighted average total organic HAP concentration measured during the separate initial performance test specified by § 63.1349(b)(7) must be used to determine initial compliance.<br>(v) The time weighted average THC concentration measured during the initial performance test specified by § 63.1349(b)(4) must be used to determine the site-specific THC limit. Using the fraction of time the inline kiln/raw mill is on and the fraction of time that the inline kiln/raw mill is off, calculate this limit as a time weighted average of the THC levels measured during raw mill on and raw mill off testing using one of the two approaches in § 63.1349(b)(7)(vii) or (viii) depending on the level of organic HAP measured during the compliance test.<br><br>**(**5) *Mercury Compliance.* If you are subject to limitations on mercury emissions in § 63.1343(b), you must demonstrate compliance with the mercury standards by using the performance test methods and procedures in § 63.1349(b)(5). You must demonstrate compliance by operating a mercury CEMS or a sorbent trap based CEMS. Compliance with the mercury emissions standard must be determined based on the first 30 operating days you operate a mercury CEMS or sorbent trap monitoring system after the compliance date of this rule.<br>(i) In calculating a 30 operating day emissions value using an integrating sorbent trap CEMS, assign the average Hg emissions concentration determined for an integrating period (e.g., 7 day sorbent trap monitoring system sample) to each relevant hour of the kiln operating days spanned by each integrated sample. Calculate the 30 kiln operating day emissions rate value using the assigned hourly Hg emissions concentrations and the respective flow and production rate values collected during the 30 kiln operating day performance test period. Depending on the duration of each integrated sampling period, you may not be able to calculate the 30 kiln operating day emissions value until several days after the end of the 30 kiln operating day performance test period.<br>(ii) For example, a sorbent trap monitoring system producing an integrated 7-day sample will provide Hg concentration data for each hour of the first 28 kiln operating days (i.e., four values spanning 7 days each) of a 30 operating day period. The Hg concentration values for the hours of the last 2 days of the 30 operating day period will not be available for calculating the emissions for the performance test period until at least five days after the end of the subject period.<br><br>**(**7) *Commingled Exhaust Requirements.* If the coal mill exhaust is commingled with kiln exhaust in a single stack, you may demonstrate compliance with the kiln emission limits by either:<br>(i) Performing required emissions monitoring and testing on the commingled coal mill and kiln exhaust, or<br>(ii) Perform required emission monitoring and testing of the kiln exhaust prior to the reintroduction of the coal mill exhaust, and also testing the kiln exhaust diverted to the coal mill. All emissions must be added together for all emission points, and must not exceed the limit per each pollutant as listed in § 63.1343(b). |
| **§63.1348(b)** | *Continuous Monitoring Requirements.* 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.<br><br>(1) *General requirements.* (i) You must monitor and collect data according to §63.1350 and the site-specific |

| | |
|---|---|
| | monitoring plan required by §63.1350(o).<br><br>(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.<br><br>(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<br><br>(iv) *Clinker production.* 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).<br><br>(2) *PM compliance.* 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).<br><br>(3) *Opacity Compliance.* If you are subject to the limitations on opacity under § 63.1345, you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(f) based on the maximum 6-minute average opacity exhibited during the performance test period. You must initiate corrective actions within one hour of detecting visible emissions above the applicable limit.<br>(i) *COMS.* If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a COMS such that it is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(i).<br>(ii) *Bag Leak Detection System (BLDS).* If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a BLDS that is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(ii).<br>(4) *D/F Compliance.* If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a continuous monitoring system (CMS) that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of § 63.1350(g).<br>(5) *Activated Carbon Injection Compliance.*<br>(i) If you use activated carbon injection to comply with the D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated, and maintained to record the rate of activated carbon injection in accordance with the requirements § 63.1350(h)(1).<br>(ii) If you use activated carbon injection to comply with the D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated and maintained to record the activated carbon injection system gas parameter in accordance with the requirements of § 63.1350(h)(2).<br>(6) *THC Compliance.*<br>(i) If you are subject to limitations on THC emissions under § 63.1343(b), you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(i) and (j).<br>(ii) THC must be measured either upstream of the coal mill or in the coal mill stack.<br>(7) *Mercury Compliance.*<br>(i) If you are subject to limitations on mercury emissions in § 63.1343(b), you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(k). If you use an integrated sorbent trap monitoring system to determine ongoing compliance, use the procedures described in § 63.1348(a)(5) to assign hourly mercury concentration values and to calculate rolling 30 operating day emissions rates. Since you assign the mercury concentration measured with the sorbent trap to each |

| | |
|---|---|
| | relevant hour respectively for each operating day of the integrated period, you may schedule the sorbent trap change periods to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals).<br>(ii) Mercury must be measured either upstream of the coal mill or in the coal mill stack.<br>(9) *Startup and Shutdown Compliance.* All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300 degrees Fahrenheit (five minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown. |
| **§63.1348(c)** | *Changes in operations.* (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).<br><br>(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.<br><br>(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.<br><br>(ii) The performance test results must be documented in a test report according to §63.1349(a).<br><br>(iii) A test plan must be made available to the Administrator prior to performance testing, if requested.<br><br>(iv) The performance test must be conducted completed within 360 hours after the planned operational change period begins. |
| **§63.1348(d)** | *General duty to minimize emissions.* At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. |

## Performance testing requirements. §63.1349

| | |
|---|---|
| **§63.1349(a)** | 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.<br><br>(1) A brief description of the process and the air pollution control system;<br><br>(2) Sampling location description(s);<br><br>(3) A description of sampling and analytical procedures and any modifications to standard procedures;<br><br>(4) Test results;<br><br>(5) Quality assurance procedures and results; |

| | |
|---|---|
| | (6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;<br><br>(7) Raw data sheets for field sampling and field and laboratory analyses;<br><br>(8) Documentation of calculations;<br><br>(9) All data recorded and used to establish parameters for monitoring; and<br><br>(10) Any other information required by the performance test method. |
| **§63.1349(b)** | (1) *PM emissions tests.* (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).<br><br>(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).<br><br>(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.<br><br>(ii) You must determine the clinker production rate using the methods in §63.1350(d).<br><br>(iii) The emission rate, E, of PM (lb/ton of clinker) must be computed for each run using equation 3 of this section:<br><br>$E = (C_s Q_s)/(PK)$ (Eq. 3)<br>Where:<br><br>E = emission rate of particulate matter, lb/ton of clinker production;<br><br>$C_s$= concentration of particulate matter, gr/scf;<br><br>$Q_s$= volumetric flow rate of effluent gas, where $C_s$and $Q_s$are on the same basis (either wet or dry), scf/hr;<br><br>P = total kiln clinker production rate, ton/hr; and<br><br>K = conversion factor, 7000 gr/lb.<br><br>(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 computed for each run using equation 4 of this section:<br><br>$E_c = \frac{[(C_{sk} Q_{sk}) + (C_{sb} Q_{sb})]}{K P}$ (Eq. 4)<br>Where:<br><br>$E_c$= combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and bypass stack, lb/ton of kiln clinker production;<br><br>$C_{sk}$= concentration of particulate matter in the kiln or in-line kiln/raw mill effluent gas, gr/scf;<br><br>$Q_{sk}$= 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;<br><br>$C_{sb}$= concentration of particulate matter in the alkali bypass gas, gr/scf;<br><br>$Q_{sb}$= 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;<br><br>P = total kiln clinker production rate, ton/hr; and<br><br>K = conversion factor, 1000 g/kg (7000 gr/lb).<br><br>(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.<br><br>(i) There are no individual readings greater than 10 percent opacity;<br><br>(ii) There are no more than three readings of 10 percent for the first 1-hour period.<br><br>(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.<br><br>(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).<br><br>(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.<br>(iii) Hourly average temperatures must be calculated for each run of the performance test.<br><br>(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).<br><br>(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.<br><br>(B) The performance test report must include the brand and type of sorbent used during the performance test.<br><br>(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).<br><br>(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).<br><br>(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<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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).<br><br>(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:<br><br>$E = (C_s Q_s) / (PK)$ (Eq. 5)<br>Where:<br><br>E = emission rate of mercury, lb/million tons of clinker production;<br><br>$C_s$= concentration of mercury, g/scm;<br><br>$Q_s$= volumetric flow rate of effluent gas, where $C_s$and $Q_s$are on the same basis (wet or dry), scm/hr;<br><br>P = total kiln clinker production rate, million ton/hr; and<br><br>K = conversion factor, 1000 g/kg (454 g/lb). |
| **§63.1349(c)** | *Performance test frequency.* 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. |
| **§63.1349(d)** | *Performance test reporting requirements.*<br><br>(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. |

| | |
|---|---|
| | (i) The initial performance test data as recorded under paragraph (b) of this section.<br><br>(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.<br><br>(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) ( *see http://www.epa.gov/ttn/chief/ert/ert_tool.html/* ). |
| **§63.1349(e)** | 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. |

## Monitoring requirements. §63.1350

| | |
|---|---|
| **§63.1350(a)** | **(1)** Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of this section.<br>**(3)** For each existing unit that is equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests.<br>**(4)** Any instance where the owner or operator fails to comply with the continuous monitoring requirements of this section is a violation. |
| **§63.1350(b)** | **(b) PM monitoring requirements.** (1)(i) PM CPMS. You will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in § 63.1349(b)(1) (i) through (vi) of this subpart. You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration.<br>**(ii)** To determine continuous compliance, you must use the PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day.<br>**(iii)** For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, you must:<br>**(A)** Within 48 hours of the exceedance, visually inspect the APCD;<br>**(B)** If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and<br>**(C)** Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph.<br>**(iv)** PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of this subpart. |
| **§63.1350(d)** | *Clinker production monitoring requirements.* If you are subject to an emissions limitation on particulate matter, mercury, $NO_X$, or $SO_2$emissions (lb/ton of clinker), you must:<br><br>(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 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.<br><br>(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.<br><br>(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).<br><br>(3) Record the daily clinker production rates and kiln feed rates; and<br><br>(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section. |
| **§63.1350(f)** | *Opacity monitoring requirements.* 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.<br><br>(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.<br><br>(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.<br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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).<br><br>(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.<br>(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. |

| | |
|---|---|
| **§63.1350(g)** | *D/F monitoring requirements.* 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.<br><br>(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.<br><br>(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).<br><br>(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.<br><br>(iii) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months. |

| | |
|---|---|
| | (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.<br><br>(3) The required minimum data collection frequency must be one minute.<br><br>(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.e.*, the CMS is not out-of-control.)<br><br>(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. |
| **§63.1350(i)** | *THC Monitoring Requirements.* 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.<br><br>(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.<br><br>(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. |
| **§63.1350(j)** | *Total organic HAP monitoring requirements.* 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, your 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. |

| | |
|---|---|
| **§63.1350(k)** | *Mercury monitoring requirements.* If you have a kiln 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 (PS 12A) of appendix B to part 60 of this chapter or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of appendix B to part 60 of this chapter. You must monitor mercury continuously according to paragraphs (k)(1) through (5) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.<br>(1) You must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of 5 µg/m 3 of total mercury or higher level if necessary to include Hg concentrations which may occur (excluding concentrations during in-line raw "mill off" operation). As specified in PS 12A, Section 6.1.1, the data recorder output range must include the full range of expected Hg concentration values which would include those expected during "mill off" conditions. Engineering judgments made and calculations used to determine the corresponding span concentration from the emission standard shall be documented in the site-specific monitoring plan and associated records.<br>(2) In order to quality assure data measured above the span value, you must use one of the four options in paragraphs (k)(2)(i) through (iv) of this section.<br>(i) Include a second span that encompasses the Hg emission concentrations expected to be encountered during "mill off" conditions. This second span may be rounded to a multiple of 5 µg/m 3 of total mercury.<br>The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required. |

(ii) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (k)(1) of this section using the following procedure. Conduct a weekly "above span linearity" calibration challenge of the monitoring system using a reference gas with a certified value greater than your highest expected hourly concentration or greater than 75 percent of the highest measured hourly concentration. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1 and must be introduced to the measurement system at the probe. Record and report the results of this procedure as you would for a daily calibration. The "above span linearity" challenge is successful if the value measured by the Hg CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the Hg CEMS during the above span linearity challenge exceeds ±10 percent of the certified value of the reference gas, the monitoring system must be evaluated and repaired and a new "above span linearity" challenge met before returning the Hg CEMS to service, or data above span from the Hg CEMS must be subject to the quality assurance procedures established in paragraph (k)(2)(iii) of this section. In this manner all hourly average values exceeding the span value measured by the Hg CEMS during the week following the above span linearity challenge when the CEMS response exceeds ±20 percent of the certified value of the reference gas must be normalized using Equation 22.

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} \times \text{Measured stack gas result} = \text{Normalized stack gas result} \quad \text{(Eq. 22)}$$

(iii) Quality assure any data above the span value established in paragraph (k)(1) of this section using the following procedure. Any time two consecutive 1-hour average measured concentrations of Hg exceeds the span value you must, within 24 hours before or after, introduce a higher, "above span" Hg reference gas standard to the Hg CEMS. The "above span" reference gas must meet the requirements of PS 12A, Section 7.1, must target a concentration level between 50 and 150 percent of the highest expected hourly concentration measured during the period of measurements above span, and must be introduced at the probe. While this target represents a desired concentration range that is not always achievable in practice, it is expected that the intent to meet this range is demonstrated by the value of the reference gas. Expected values may include "above span" calibrations done before or after the above span measurement period. Record and report the results of this procedure as you would for a daily calibration. The "above span" calibration is successful if the value measured by the Hg CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the Hg CEMS exceeds 20 percent of the certified value of the reference gas, then you must normalize the one-hour average stack gas values measured above the span during the 24-hour period preceding or following the "above span" calibration for reporting based on the Hg CEMS response to the reference gas as shown in Equation 22. Only one "above span" calibration is needed per 24-hour period.

(3) You must operate and maintain each Hg CEMS or an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, you may apply the appropriate exception for sorbent trap section 2 breakthrough in (k)(3)(i) through (iv) of this section:

(i) For stack Hg concentrations >1 µg/dscm, ≤10% of section 1 mass;

(ii) For stack Hg concentrations ≤1 µg/dscm and >0.5 µg/dscm, ≤20% of section 1 mass;

(iii) For stack Hg concentrations ≤0.5 µg/dscm and >0.1 µg/dscm, ≤50% of section 1 mass; and

(iv) For stack Hg concentrations ≤0.1 µg/dscm, no breakthrough criterion assuming all other QA/QC specifications are met.

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

(5) If you use a Hg CEMS or an integrated sorbent trap monitoring system, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (10) of this section. If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through separate stacks, you must account for the mercury emitted from those stacks by following the procedures in (k)(5)(i) through (iv) of this section:

(i) Develop a mercury hourly mass emissions rate by conducting performance tests annually, within 11 to 13 calendar months after the previous performance test, using Method 29, or Method 30B, to measure the concentration of mercury in the gases exhausted from the alkali bypass and coal mill.

(ii) On a continuous basis, determine the mass emissions of mercury in lb/hr from the alkali bypass and coal mill exhausts by using the mercury hourly emissions rate and the exhaust gas flow rate to calculate hourly mercury emissions in lb/hr.

(iii) Sum the hourly mercury emissions from the kiln, alkali bypass and coal mill to determine total mercury emissions. Using hourly clinker production, calculate the hourly emissions rate in pounds per ton of clinker to

| | |
|---|---|
| | determine your 30 day rolling average.<br>(iv) If mercury emissions from the coal mill and alkali bypass are below the method detection limit for two consecutive annual performance tests, you may reduce the frequency of the performance tests of coal mills and alkali bypasses to once every 30 months. If the measured mercury concentration exceeds the method detection limit, you must revert to testing annually until two consecutive annual tests are below the method detection limit.<br>(6) If you operate an integrated sorbent trap monitoring system conforming to PS 12B, you may use a monitoring period at least 24 hours but no longer than 168 hours in length. You should use a monitoring period that is a multiple of 24 hours (except during relative accuracy testing as allowed in PS 12B). |

| | |
|---|---|
| **§63.1350(m)** | *Parameter monitoring requirements.* 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 (m)(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 (11) that are applicable to you.<br><br>(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.<br><br>(2) You must conduct all monitoring in continuous operation at all times that the unit is operating.<br><br>(3) Determine the 1-hour block average of all recorded readings.<br><br>(4) Record the results of each inspection, calibration, and validation check.<br><br>(5) Liquid flow rate monitoring requirements. If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (m)(5)(i) through (iv) of this section.<br><br>(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.<br><br>(ii) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.<br><br>(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.<br><br>(iv) Conduct a flow sensor calibration check at least semiannually.<br><br>(6) Specific pressure monitoring requirements. If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (m)(6)(i) through (vi) of this section.<br><br>(i) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.<br><br>(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion. (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.<br>(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.<br>(iv) Check pressure tap pluggage daily.<br>(iv) Check pressure tap pluggage daily.<br><br>(v) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.<br><br>(vi) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.<br><br>(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.<br><br>(ii) Ensure the sample is properly mixed and representative of the fluid to be measured.<br><br>(iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.<br><br>(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.<br><br>(i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.<br><br>(ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.<br><br>(iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.<br><br>(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.<br><br>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.<br><br>(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.<br><br>(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.<br><br>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.<br><br>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.<br>(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.<br><br>(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.<br><br>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.<br><br>(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:<br><br>(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;<br>(ii) Sealing off defective bags or filter media;<br>(iii) Replacing defective bags or filter media or otherwise repairing the control device;<br>(iv) Sealing off a defective fabric filter compartment;<br>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or<br>(vi) Shutting down the process producing the PM emissions. |

| | |
|---|---|
| **§63.1350(n)** | *Continuous flow rate monitoring system.* 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.<br>(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.<br><br>(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.<br><br>(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.<br><br>(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.<br><br>(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.<br><br>(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.<br><br>(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).<br><br>(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).<br><br>(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.<br>(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.<br><br>(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.<br><br>(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).<br><br>(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). |
| **§63.1350(o)** | *Alternate monitoring requirements approval.* You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section. |

| | |
|---|---|
| | (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.<br><br>(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.<br><br>(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:<br><br>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;<br><br>(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<br><br>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.<br><br>(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:<br><br>(i) Notice of the information and findings upon which the intended disapproval is based; and<br><br>(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.<br><br>(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.<br>(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. |
| **§63.1350(p)** | *Development and submittal (upon request) of monitoring plans.* 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.<br><br>(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.<br><br>(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); |

| | |
|---|---|
| | (ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and<br><br>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).<br><br>(2) In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.<br><br>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);<br><br>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and<br><br>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).<br><br>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.<br><br>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.<br><br>(5) *BLDS monitoring plan.* 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;<br><br>(i) Installation of the BLDS;<br>(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;<br>(iii) Operation of the BLDS, including quality assurance procedures;<br>(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;<br>(v) How the BLDS output will be recorded and stored. |

## Additional test methods. § 63.1352

| | |
|---|---|
| **§63.1352** | (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. |

## Notification Requirements. §63.1353

| | |
|---|---|
| **§63.1353(a)** | 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. |
| **§63.1353(b)** | Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:<br><br>(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. |

| | |
|---|---|
| | (2) Notification of performance tests, as required by §§63.7 and 63.9(e).<br><br>(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).<br>(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.<br><br>(5) Notification of compliance status, as required by §63.9(h). |

## Reporting Requirements. §63.1354

| | |
|---|---|
| **§63.1354(a)** | (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. |
| **§63.1354(b)** | 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:<br><br>(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.<br>(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.<br>(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.<br>(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.<br>(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).<br>(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.<br>(9) The owner or operator shall submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in § 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in § 63.10(e)(3)(vi). In addition, the summary report shall include:<br>(i) All exceedances of maximum control device inlet gas temperature limits specified in § 63.1346(a) and (b);<br>(ii) Notification of any failure to calibrate thermocouples and other temperature sensors as required under § 63.1350(g)(1)(iii) of this subpart; and<br>(iii) Notification of any failure to maintain the activated carbon injection rate, and the activated carbon |

| | |
|---|---|
| | injection carrier gas flow rate or pressure drop, as applicable, as required under § 63.1346(c)(2).<br>(iv) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under § 63.1347(a)(3).<br>(v) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with § 63.1347(a).<br>(vi) For each PM CPMS, HCl, Hg, and THC CEMS, SO2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems.<br>(vii) In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions.<br>(10) If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.<br>(11)<br>(i) You must submit the information specified in paragraphs (b)(11)(i)(A) and (B) of this section no later than 60 days following the initial performance test. All reports must be signed by a responsible official.<br>(A) The initial performance test data as recorded under § 63.1349(a).<br>(B) The values for the site-specific operating limits or parameters established pursuant to § 63.1349(b)(1), (3), (6), (7), and (8), as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.<br>(C) 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 any standard covered by this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to the EPA by successfully submitting the data electronically via CEDRI and by using the Electronic Reporting Tool (ERT) (see *https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert*). For any performance evaluations with no corresponding RATA pollutants listed on the ERT website, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in § 63.13.<br>(ii) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (*e.g.* beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.<br>(12) All reports required by this subpart not subject to the requirements in paragraphs (b)(9) introductory text and (b)(11)(i) of this section must be sent to the Administrator at the appropriate address listed in § 63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (*e.g.*, by commonly used electronic media such as Excel spreadsheet, on CD or hard copy).<br>The Administrator retains the right to require submittal of reports subject to paragraphs (b)(9) introductory text and (b)(11)(i) of this section in paper format. |

| | |
|---|---|
| **§63.1354(c)** | For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, you must report the failure in the semi-annual compliance report required by § 63.1354(b)(9). The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with § 63.1348(d), including actions taken to correct a malfunction. |

## Recordkeeping Requirements. §63.1355

| | |
|---|---|
| **§63.1355(a)** | 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. |
| **§63.1355(b)** | 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<br><br>(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;<br>(2) All records of applicability determination, including supporting analyses; and<br>(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. |
| **§63.1355(c)** | 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). |
| **§63.1355(d)** | 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. |
| **§63.1355(e)** | You must keep records of the daily clinker production rates and kiln feed rates. |
| **§63.1355(f)** | You must keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period. |
| **§63.1355(g)** | (1) You must keep records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.<br>(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. |
| **§63.1355(h)** | For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions. |

## Implementation and enforcement. § 63.1358

| | |
|---|---|
| **§63.1358** | (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.<br><br>(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.<br><br>(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.<br>(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.<br>(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.<br>(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.<br>(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart. |

# 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: 1003032, 1003033, 1003042, 1003044, 1003045, 1003048, 1003049, and 1003053. |

| | |
|---|---|
| **§63.6585(a)** | 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. |
| **§63.6585(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. |
| **§63.6585(c)** | An area source of HAP emissions is a source that is not a major source. |
| **§63.6585(d)** | 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. |
| **§63.6585(e)** | 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

| | |
|---|---|
| **§63.6595(a)(1)** | 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. |
| **§63.6595(a)(5)** | 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. |
| **§63.6595(a)(6)** | 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. |

| | |
|---|---|
| **§63.6605(a)** | You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. |
| **§63.6605(b)** | 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. |
| **§63.6630(a)** | You must demonstrate initial compliance with each emission and operating limitation that applies to you according to Table 5 of this subpart. |
| **§63.6630(c)** | You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. |
| **§63.6640(a)** | 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. |
| **§63.6640(d)** | 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). |
| **§63.6640(f)** | *Requirements for emergency stationary RICE.* (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.<br><br>(i) There is no time limit on the use of emergency stationary RICE in emergency situations.<br><br>(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.<br><br>(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 |

| | |
|---|---|
| | 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. |

## 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

| | |
|---|---|
| **§63.6601** | 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. |

## 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

| | |
|---|---|
| **§63.6602** | 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. |

## Emission limitations and operating limitations for existing stationary RICE located at an area source of HAP emissions. §63.6603

| | |
|---|---|
| **§63.6603(a)** | (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. |
| **§63.6603(b)** | 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. |

## Testing and initial compliance requirements. §63.6611

| | |
|---|---|
| **§63.6611** | 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. |
| **§63.6612** | 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). |

| | |
|---|---|
| **§63.6612(b)** | 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.<br><br>(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.<br><br>(2) The test must not be older than 2 years.<br><br>(3) The test must be reviewed and accepted by the Administrator.<br><br>(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. |
| **§63.6620(a)** | You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you. |
| **§63.6620(b)** | 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. |
| **§63.6620(d)** | You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour. |
| **§63.6620(e)(1)** | You must use Equation 1 of this section to determine compliance with the percent reduction requirement:<br><br>$\frac{C_i - C_o}{C_i} \times 100 = R$ (Eq. 1)<br><br>Where:<br><br>$C_i$= concentration of CO or formaldehyde at the control device inlet,<br>$C_o$= concentration of CO or formaldehyde at the control device outlet, and<br>R = percent reduction of CO or formaldehyde emissions.<br><br>(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 ($CO_2$). If pollutant concentrations are to be corrected to 15 percent oxygen and $CO_2$concentration is measured in lieu of oxygen concentration measurement, a $CO_2$correction factor is needed. Calculate the $CO_2$correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.<br><br>(i) Calculate the fuel-specific $F_o$value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:<br><br>$F_o = \frac{0.209\ F_d}{F_c}$ (Eq. 2)<br><br>Where:<br><br>$F_o$= Fuel factor based on the ratio of oxygen volume to the ultimate $CO_2$volume produced by the fuel at zero percent excess air.<br><br>0.209 = Fraction of air that is oxygen, percent/100.<br><br>$F_d$= Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu). |

| | |
|---|---|
| | $F_c$= Ratio of the volume of $CO_2$produced to the gross calorific value of the fuel from Method 19, $dsm^3$ /J (dscf/$10^6$ Btu).<br><br>(ii) Calculate the $CO_2$correction factor for correcting measurement data to 15 percent oxygen, as follows:<br><br>$X_{co_2} = \frac{5.9}{F_o}$ (Eq. 3)<br><br>Where:<br><br>$X_{co2}$= $CO_2$correction factor, percent.<br>5.9 = 20.9 percent $O_2$−15 percent $O_2$, the defined $O_2$correction value, percent.<br><br>(iii) Calculate the $NO_X$and $SO_2$gas concentrations adjusted to 15 percent $O_2$using $CO_2$as follows:<br><br>$C_{adj} = C_d \frac{X_{co_2}}{\%CO_2}$ (Eq. 4)<br><br>Where:<br><br>$\%CO_2$= Measured $CO_2$concentration measured, dry basis, percent. |
| **§63.6620(f)** | 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. |
| **§63.6620(g)** | 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.<br><br>(1) Identification of the specific parameters you propose to use as operating limitations;<br><br>(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;<br><br>(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;<br><br>(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<br><br>(5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. |
| **§63.6620(h)** | 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.<br><br>(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;<br><br>(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;<br><br>(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; |

| | |
|---|---|
| | (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;<br><br>(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;<br><br>(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and<br><br>(7) A discussion of why, from your point of view, it is infeasible or unreasonable to adopt the parameters as operating limitations. |
| **§63.6620(i)** | 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. |
| **§63.6630(b)** | During the initial performance test, you must establish each operating limitation in Tables 1b and 2b of this subpart that applies to you. |

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

| | |
|---|---|
| **§63.6625(e)** | 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: |
| **§63.6625(e)(2)** | 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; |
| **§63.6625(e)(3)** | An existing emergency or black start stationary RICE located at an area source of HAP emissions; |
| **§63.6625(e)(4)** | 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; |
| **§63.6625(e)(7)** | 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; |
| **§63.6625(f)** | 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. |
| **§63.6625(h)** | 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. |

| | |
|---|---|
| **§63.6630(c)** | You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. |
| **§63.6635(a)** | If you must comply with emission and operating limitations, you must monitor and collect data according to this section. |
| **§63.6635(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. |
| **§63.6635(c)** | You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. |

## Notifications, Reports, and Records. §63.6645

| | |
|---|---|
| **§63.6645(a)** | 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; |
| **§63.6645(a)(1)** | 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. |
| **§63.6645(a)(2)** | An existing stationary RICE located at an area source of HAP emissions. |
| **§63.6645(a)(5)** | 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. |
| **§63.6645(f)** | 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). |
| **§63.6645(g)** | 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). |
| **§63.6645(h)** | 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).<br><br>(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.<br><br>(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). |
| **§63.6650(a)** | You must submit each report in Table 7 of this subpart that applies to you. |

| | |
|---|---|
| **§63.6650(b)** | (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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.<br><br>(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31. |
| **§63.6650(c)** | The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.<br>(1) Company name and address.<br><br>(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.<br><br>(3) Date of report and beginning and ending dates of the reporting period.<br><br>(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.<br><br>(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. |

| | |
|---|---|
| | (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 |
| **§63.6655(a)** | 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.<br><br>(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).<br><br>(2) Records of the occurrence and duration of each malfunction of operation ( *i.e.*, process equipment) or the air pollution control and monitoring equipment.<br><br>(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).<br><br>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.<br><br>(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. |
| **§63.6655(f)** | 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.<br><br>(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.<br><br>(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. |
| **§63.6660(a)** | Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). |
| **§63.6660(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. |
| **§63.6660(c)** | 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). |

*Remainder of Page Intentionally Left Blank*

# Appendix A

# PSD Conditions – Permit #78-73

## Special Conditions – Plant Modernization

### A. Performance Tests

1. Within 60 days after achieving the maximum production rate of each new modified source, but not later than 180 days after initial startup of each new or modified source, and at such other times as specified by the EPA, California Portland Cement Company shall conduct performance tests (as defined in 40 CFR 60.8) for pollutants to be tested for particulate matter and sulfur dioxide and furnish the District and EPA a written report of the results of such tests. All performance tests shall be conducted at the maximum operating capacity of the facilities being tested. The tests shall be conducted on an annual basis. The EPA (Attn: AIR-3) shall be notified in writing at least 30 days prior to such tests 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 will minimize the possibility of EPA rejection of test results for procedural deficiencies.

2. The performance tests for $SO_2$ and particulate matter shall be conducted for the equipment designated below:
   - **i.** Primary Crusher (particulate matter)
   - **ii.** Preheater Kiln (particulate matter and $SO_2$)
   - **iii.** Clinker Cooler (particulate matter)
   - **iv.** Five (5) existing kilns after retrofitting with new baghouses (particulate matter)

   Performance tests for the emissions of particulate matter and sulfur dioxide shall be conducted and results reported in accordance with Part 60.8 and Methods 1,2,5 and 6 of Appendix A of the Standards of Performance for New Sources regulations (40 CFR 60) on the equipment named above. Method 5 procedures and results may be based on the front half catch only. The EPA shall be notified at least 30 days in advance of such test to allow an observer to be present. In lieu of the above mentioned test methods, equivalent methods may be used if approved by the EPA.

### B. Sulfur Dioxide Emission Monitoring

California Portland Cement Company shall use an approved portable continuous monitoring device to conduct continuous $SO_2$ emission monitoring on the preheater kiln from the date of initial startup for the duration of ninety (90) days thereafter. This monitoring period may be extended by the EPA by notice in writing. Portable continuous monitoring equipment and procedures shall be in accordance with 40 CFR Part 60.13 (Standards of Performance for New Stationary Sources, Subpart A). Monitoring data report shall be submitted to the EPA and District in writing within five (5) days after the end of each 30-day operations period. In addition, daily throughput rates of the preheater kiln shall be included in the report.

## C. Emission Limits for Particulate Matter and Sulfur Dioxide

On and after the date of startup (as defined in 40 CFR 60.2(o)) of the equipment designated in (1)(b)(i), (ii) and (iii) above, California Portland Cement Company shall not discharge or cause the discharge into the atmosphere from the subject equipment, any gases which contain particulate matter and sulfur dioxide in excess of the amounts indicated for the subject equipment.

**Particulate Matter:**

| | | | |
|---|---|---|---|
| Primary Crusher: | 5.00 | lb/hr | (Max 2-hr avg) |
| Preheater Kiln: | 36.00 | lb/hr | (Max 2-hr avg) |
| Clinker Cooler: | 21.00 | lb/hr | (Max 2-hr avg) |

**Sulfur Dioxide**

| | | | |
|---|---|---|---|
| Preheater Kiln: | 616 | lb/hr | (Max 2-hr avg) |

Upon EPA examination of the continuous $SO_2$ emission monitoring data on the preheater kiln, a new emission limit for $SO_2$, which may be a lower limit, shall be set by the EPA in consideration of such data. Furthermore, California Portland Cement Company, in future expansion $SO_2$ trade-offs, shall be prohibited from using any $SO_2$ emissions gained in the difference between the new $SO_2$ emission limit to be set and the $SO_2$ emission limit of 616 lb/hr (max 2-hr avg) as determined in the EPA Ambient Air Quality Impact Report dated October 10, 1978.

## D. Shut-down and Retrofit on Existing Kilns

Within 180 days from the startup (as defined in 40 CFR 60.2(o)) of the proposed preheater kiln (known as Kiln No. 6), California Portland Cement Company shall not operate more than two (2) of their existing kilns at the Mojave plant at any one time without the new retrofitted baghouses. California Portland Cement Company shall notify the EPA and the District in writing to specify which kilns are shut down and which kilns are in operation and any changes to the shutdown schedule thereof. Existing kilns shall be retrofitted with new baghouses no later than December 31, 1986. Exhaust gases from all retrofitted existing kilns shall be directed through baghouses prior to venting to the atmosphere. Pressure gauges shall be installed on each compartment of each baghouse for these facilities.

## E. Emission Limits for Retrofitted Kilns

On and after the date of start-up (as defined in 40 CFR 60.2(o)) of the equipment designated in (1)(b)(iv), after retrofitting with new baghouses, California Portland Cement Company shall not discharge or cause the discharge into the atmosphere from the subject equipment, any gases which contain particulate matter in excess of the amount indicated for the subject equipment.

| | | | |
|---|---|---|---|
| Existing Kiln after retrofit with new baghouse: | 10.4 | lb/hr | (Max 2-hr avg) |

## F. Control Technology

Exhaust gases from the equipment designated below shall be directed through baghouses prior to venting to the atmosphere. Pressure gauges shall be installed on each compartment of each baghouse, and visible emission shall not exceed 10% opacity from any baghouse.

| System | Equipment | Source No. on Plot Plan |
|---|---|---|
| Primary Crusher | Hopper | 1 |
| Sample System | Surge Silo | 3 A and B |
| | Surge Silo Reclaim | 4 A and B |
| | Conveyors and Transfer Points | 5 |
| | Sampling Plant – Mill and Screens | 6 |
| | Sampling Plant – Pulverizer | 7 |
| Additives System | Dump Hopper Reclaim | 9 |
| | Conveyor and Transfer Points | 10 |
| | Additives Storage Building | 12 |
| | Reclaim Conveyor | 14 |
| Limestone Stacker | Storage Building and Stacker | 11 |
| Reclaim System | Reclaim and Conveyors | 13 |
| Roller Mill | Roller Mill Silos | 15 |
| | Silos Reclaim | 16 |
| | Conveyor | 19 |
| Homogenizing and | Homogenizing Silos | 20 |
| Kiln Feed System | Silos – Reclaim | 21 |
| | Kiln Feed System | 22 |
| Pyroprocessing System | Coal Mill for Preheater | 23 |
| | Coal Mill for Kiln | 24 |
| Clinker Cooler | Gathering Conveyors | 25 |
| | Clinker Transfer | 26 |
| Ball Mills | Silos and Conveyors | 28 |
| | Silos – Reclaim | 29 |
| | Ball Mill | 30 |
| | Ball Mill – Separator | 31 |
| | Conveyors | 33 |
| Crusher | Crusher | 32 |

## G. Stack Monitoring Requirement

Upon startup (as defined in 40 CFR 60.2(o)) of the preheater kiln (known as Kiln No. 6), California Portland Cement Company shall have installed a transmissometer in the exhaust stack of such equipment, and such instrument shall be operable at this time.

## H. NSPS Requirements

The preheater kiln and clinker cooler are subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60); California Portland Cement Company will meet all requirements of Subparts A and F of this regulation.

## I. Certification

California Portland Cement Company shall notify the EPA in writing of compliance with Special Conditions D, F and G above, and shall make such notification within fifteen (15) days of such compliance. This letter must be signed by a responsible representative of the California Portland Cement Company.

### Agency Notification

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

A. Director, Enforcement and Compliance Assurance Division (Attn: ENF-2-1) U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105
Or by email to aeo_r9@epa.gov or CDX

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

# PSD Conditions – Permit #SE 75-01

**Special Conditions – Solid Fuels**

A. California Portland Cement Company shall utilize the water spray systems at all times when the loading, conveying, crushing, and storage units are in operation.

B. California Portland Cement Company shall notify EPA of any anticipated change to the plans submitted with the application and shall not affect such changes in the construction or operation of the above-mentioned facilities until EPA approval is received if such changes will result in an increase in any pollutant emitted.

## PSD Conditions – Permit #220121

### I. Notification of Commencement of Construction and Startup

The District shall be notified in writing of the anticipated date of initial startup of the source not more than sixty (60) days nor less than thirty (30) days prior to such date and shall be notified in writing of the actual date of commencement of construction and startup within fifteen (15) days after such date.

### II. Facilities Operation

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of approval to Construct/Modify shall at all times be maintained in god/working order and be operated as efficiently as possible so as to minimize air pollutant emissions

### III. Malfunction

The District shall be notified by telephone within 48 hours following and failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable emissions limit stated in Section VIII of these conditions. In addition, the District shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.
e date of the initial failure, the period of time over which emissions were increased due to the failure the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.
date of the initial failure, the period of time over which emissions were increased due to the failure the cause of the failure, the estimated resultant emissions in excess of those allowed under Section VIII of these conditions, and the methods utilized to restore normal operations. Compliance with this malfunction notification shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.

### IV. Right to Entry

The Air Pollution Control Officer of the District, EPA Regional Administrator, or the Executive Officer of the California Air Resources Board, and/or their authorized representative, upon presentation of credentials, shall be permitted:

A. to enter the premises where the source is located or in which any records are required to be kept under the terms and conditions of this Approval to Construct/Modify; and

B. at reasonable times to have access to and copy any records required to be kept under the terms and conditions of the Approval to Construct/Modify; and

C. to inspect any equipment, operation, or method required in this Approval to Construct/Modify; and

D. to sample emissions from the source

## V. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed or modified, this approval to Construct/Modify shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the EPA Regional Administrator, the California Air Resources Board, and the District.

## VI. Severability

The provisions of this Approval to Construct/Modify are able, and if any provision of this Approval to Construct/Modify is held invalid, the remainder of this Approval to Construct/Modify shall not be affected thereby.

## VII. Other Applicable Requirements

The owner and operator of the proposed project shall construct and operate the proposed stationary source in compliance with all other applicable provisions of 40 CFR Parts 52, 60, 61, and 63 and all other applicable federal, state, and local air quality regulations.

## VIII. Special Conditions -

### A. Performance Tests:

1. California Portland Cement Company shall conduct performance tests for CO in conjunction with the annual testing performed for the Eastern Kern Air Pollution Control District Permit and at such other times as specified by the District or the EPA. California Portland Cement Company shall furnish the District and EPA 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 from California Portland Cement Company, the District may approve the conducting of performance test at a lower specified production rate. After initial performance tests and upon written request and adequate justification from California Portland Cement Company, the EPA may waive a specified annual test for the facility.
2. t from California Portland Cement Company, the District may approve the conducting of performance test at a lower specified production rate. After initial performance tests and upon written request and adequate justification from California Portland Cement Company, the EPA may waive a specified annual test for the facility.
3. from California Portland Cement Company, the District may approve the conducting of

performance test at a lower specified production rate. After initial performance tests and upon written request and adequate justification from California Portland Cement Company, the EPA may waive a specified annual test for the facility.

4. 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 District and 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.

5. For performance test purposes, sampling ports, platforms and access shall be provided by California Portland Cement Company on the kiln exhaust stack in accordance with 40 CFR 60.8(e)

**B. Emission Limits For Carbon Monoxide (CO)**

On and after the date this permit is issued, California Portland Cement Company shall not discharge or cause the discharge of CO into the atmosphere from the kiln stack in excess of the following amounts:

| | | |
|---|---|---|
| Preheater Kiln | 3.0 | lb/ton clinker (90-day rolling avg.) |
| | 2,553.00 | lb/hr (Max. 8 hr avg.) |
| | 2,277.00 | ton/yr |

**C. Emission Monitoring Requirements**

1. Prior to operating at the revised limits provided in Special Condition B and thereafter, California Portland 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 4).

   b. A continuous monitoring system to measure stack gas volumetric flow rates to be located at the exhaust stack. The system shall meet EPA performance specifications (40 CFR Part 60, Appendix B, Performance Specification 6). However, if, because of its location, the flow meter cannot meet the requirements of Appendix B, California Portland Cement Company 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 B.

2. California Portland 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 five years following the date of such measurements, maintenance, report and records.

3. California Portland Cement Company shall, upon the request of the District or US EPA, submit a written report on the results of the annual performance test (i.e. RATA) on the main stack CO continuous emission monitor.

4. California Portland Cement Company shall submit a written report of all excess CO emissions to the District 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 Special Condition B. 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, California Portland Cement Company 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.

**D. NSPS Requirements**

The preheater kiln is subject to the federal regulations entitled Standards of Performance for New Stationary Sources (40 CFR 60); California Portland Cement Company will meet all

requirements of Subparts A and F of this regulation.

**E. Certification**

California Portland Cement Company shall notify the EPA in writing of compliance with Special Condition C above, and shall make such notification within fifteen (15) days of such compliance. This letter must be signed by a responsible representative of the California Portland Cement Company.

## IX. Agency Notification

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

| | | |
|---|---|---|
| Director, Air Division<br>(Attn: AIR-3)<br>U.S. Environmental Protection Agency<br>75 Hawthorne Street<br>San Francisco, CA 94105 | Manager, Permit Evaluation & Support Section, Enforcement Division<br>California Air Resources Board<br>P.O. Box 2815<br>Sacramento, CA 95812 | Air Pollution Control Officer<br>Eastern Kern Air Pollution Control District<br>2700 M Street, Suite 302<br>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 ≥ MST[1]; or
      ii. 1 time per day (minimum) if post control emissions are < MST.

4. Describe indicator ranges and performance criteria for a CEMS[2], COMS[3], or PEMS[4] [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)];

8. Major Source Trigger (Refer to 40 CFR 81.305, 40 CFR 70.3, and 40 CFR 51.165 for major threshold requirements.)

[1] Major Source Trigger (see District Rule 201.1 for requirements)
[2] Continuous Emission Monitoring System
[3] Continuous Opacity Monitoring System
[4] Predictive Emission Monitoring System

## 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)[1], the CAM rule is applicable to each emissions unit (existing and new construction) at a title V facility that meets ALL the following criteria[2]:

1. The emission unit is subject to an emission limitation or standard[3] (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)[4], that is equivalent or exceeds any Title V major source thresholds as shown on the following table:

| Pollutant | CAM PTE[4] Emission Threshold For Individual Emission Unit at Title V Facility (tons per year) |
|---|---|
| $PM_{10}$ | 100* |
| SOx | 100 |
| NOx | 25 |
| VOC | 25 |
| CO | 100 |
| 1 HAP[5] | 10 |
| 2+ HAPs | 25 |

[1] 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.

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

[3] Only emission limitation and standards from an "applicable requirement" from 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.

[4] See District Rule 210.1.IV.E.

[5] Hazardous Air Pollutants.

***The CalPortland Mojave Facility is located a PM attainment area in EKAPCD's jurisdiction and not the PM-10 moderate non-attainment area. If the Facility were located in the non-attainment area, the MST would be 50 tpy for PM-10.**

## CAM Rule Applicability (Inherent Process Determination)

**Table 1. Mojave Inherent Process Equipment Determination**

| Emission Unit | Unit Description | Control Device # | Inherent? Y/N |
|---|---|---|---|
| 001 | Primary Crusher Operation | B2-DC1 | N |
| | | B2-DC2 | N |
| | | B3-DC1 | N |
| | | C3-DC1 | N |
| | | B3-DC2 | N |
| | | C2-DC1 | N |
| 004 | D-3 Finish Mill | D3-DC8 | N |
| | | D3-DC1 | N |
| | | D3-1-DC2 | N |
| | | D3-1-M1-DC1 | Y |
| | | D3-1-M2-DC1 | Y |
| | | D3-1-M3-DC1 | Y |
| | | D3-1-DC1 | Y |
| | | D3-M4-DC1 | Y |
| | | D3-M5-DC1 | Y |
| 010 | Coal Supply System | H7-6-CM2-DC1 | Y |
| | | Receiver | Y |
| 016 | Clinker & Additive Storage Operation | H2-6-DC4 | N |
| | | D3-DC9-A | N |
| | | D3-DC9 | N |
| 017 | Finish Grinding Operation #1 | FM-1-DC1 | Y |
| | | D3-F-DC2 | N |
| | | D3-DC1 | N |
| | | D3-DC2 | Y |
| | | D3-DC3 | Y |
| | | D3-DC4 | Y |
| | | D3-DC5 | Y |
| | | D3-DC6 | N |
| | | D3-DC7 | N |
| | | FOW-1-DC1 | N |
| | | FOW-2-DC1 | N |
| | | FOW-3-DC1 | N |
| | | FOW-6-DC1 | N |

*Inherent process equipment means equipment that is necessary for the proper or safe functioning of the process, or material recovery equipment that the owner or operator documents is installed and operated primarily for purposes other than compliance with air pollution regulations. Equipment that must be operated at an efficiency higher than that achieved during normal process operations in order to comply with the applicable emission limitation or standard is not inherent process equipment. For the purposes of this part, inherent process equipment is not considered a control device.

## CAM Rule Applicability (Inherent Process Determination)-Cont.

**Table 1. Mojave Inherent Process Equipment Determination**

| Emission Unit | Unit Description | Control Device # | Inherent? Y/N |
|---|---|---|---|
| 018 | Packhouse & Loading Facilities | PH-N1-SP2 | Y |
| | | PH-N1-SP1 | Y |
| | | PHI-DC-1 | Y |
| | | PHI-DC-2 | Y |
| | | PHI-DC-3 | Y |
| | | PHI-DC-4 | Y |
| | | PHI-DC-5 | Y |
| | | PHI-DC-6 | Y |
| | | PH-I-N2-DC-1 | Y |
| | | PH-I-N3-DC-1 | Y |
| | | PH-I-DC-7 | Y |
| | | PH-E6-DC | Y |
| | | PH-E6-DC-1 | Y |
| | | PH-I-DC-2A | Y |
| 021 | Sampling System | B4-DC1 | N |
| | | B4-DC2 | N |
| | | C3-DC1 | N |
| 022 | Limestone Storage & Reclaim System | C2-DC1 | N |
| | | C2-DC2A | N |
| | | C2-DC2B | N |
| | | C2-DC3 | N |
| | | C2-DC4 | N |
| 023 | Additive System | C4-DC1 | N |
| | | C4-DC2 | N |
| | | C3-DC1 | N |
| | | C3-DC2 | N |
| | | B5-DC1 | N |
| 024 | Roller Mill System | D2-6-DC1A, DC1B, and DC1C | N |
| | | C5-DC1A, DC1B, and DC1C | N |
| | | D2-6-DC2 | Y |
| | | D2-6-DC3 | Y |
| | | D2-7-DC1 | N |
| | | D2-7-DC2 | N |
| | | D2-7-DC3 | N |
| | | D2-7-DC4 | N |
| | | D2-7-DC5 | Y |

## CAM Rule Applicability (Inherent Process Determination)-Cont.

**Table 1. Mojave Inherent Process Equipment Determination**

| Emission Unit | Unit Description | Control Device # | Inherent? Y/N |
|---|---|---|---|
| 025 | Homogenizing & Kiln Feed System | F3-6-DC1 | Y |
| | | H4-6-DC2 | Y |
| | | H4-6-DC1 | Y |
| 026 | Pyroprocessing System | Beneficiation Collector H6-6-DC1 | Y |
| | | Loadout Collector H6-6-DC2 | Y |
| | | Surge Bin Collector H6-6-DC3 | Y |
| | | Coal Mill Collector H7-6-DC1 | Y |
| | | Kiln #6 Collector H5-6-DC1 | Y |
| | | D2-6-DC1 | N |
| | | D2-6-DC2 | Y |
| | | D2-6-DC3 | Y |
| | | H4-6-DC1 | Y |
| | | H4-6-DC2 | Y |
| | | F3-6-DC1 | Y |
| | | (Lime Storage) | Y |
| 027 | Clinker Cooling System | H2-6-DC1 | N |
| | | H2-6-DC3 | N |
| 054 | Bulk Clinker Truck Loadout Operation | D3-DC8 | N |
| 055 | Finish Grinding Operation #2 | FM-2-DC1 | Y |
| 056 | Finish Grinding Operation #3 | D3-F3-DC1 | Y |
| 057 | Finish Grinding Operation #4 | D3-F4-DC1 | Y |
| 058 | Finish Grinding Operation #5 | D3-F5-DC1 | Y |
| 059 | Finish Grinding Operation #6 | D3-F6-DC3 | N |
| | | D3-FM6-DC1 | Y |
| | | D3-FM6-DC2 | N |
| 065 | Finish Mill System | D4-1-DC3 | N |
| | | D4-1-DC4 | N |
| | | D4-1-DC2 | Y |
| | | D4-1-DC1 | Y |
| | | D3-1-DC10 | Y |
| | | D3-1-DC11 | Y |
| 070 | Concrete Batch Plant | Cement Storage Silo Bin Vent | Y |
| | | Additive Storage Silo Bin Vent | N |
| | | Truck Loadout | Y |
| 073 | Packhouse Bulk Truck Loadout Operation | Bin Vent Dust Collector | Y |
| | | PH-1-N5-SP1-DC Dust Collector | Y |
| | | PH-1-N5-SP2-DC Dust Collector | Y |

# CAM Uncontrolled Emissions Calculations

**Table 2. CAM Uncontrolled Drop Emission Calculations**

| Emission Unit | Unit Description | Equipment ID | Control Device | Number of Drops[1,2,3] | Material[2] | Moisture Content[2] (w/w%) | Throughput[4,5] (ton/hr) | Throughput[4,5] (tpy) | Uncontrolled $PM_{10}$ Emission Factor[6,7] (lb/ton) | Uncontrolled $PM_{10}$ Emissions[8] (tpy) |
|---|---|---|---|---|---|---|---|---|---|---|
| 001 | Primary Crusher Operation | Scalping vibrating grizzly B2-VG1 | B2-DC1 | 1 | Limestone and Shale | - | 2,000 | 17,520,000 | 8.70E-03 | 76.21 |
| | | Impact Crusher B2-IC1 | B2-DC1 | 1 | Limestone and Shale | - | 1,700 | 14,892,000 | 2.40E-03 | 17.87 |
| | | Belt Conveyor B2-BC1 | B2-DC1 | 1 | Limestone and Shale | 3.3 | 1,700 | 14,892,000 | 9.82E-04 | 7.31 |
| | | Surge Bin | B2-DC2 | 1 | Limestone and Shale | 3.3 | 1,700 | 14,892,000 | 9.82E-04 | 7.31 |
| | | Vibrating Feeders | B3-DC1 | 4 | Limestone and Shale | - | 625 | 5,475,000 | 8.70E-03 | 23.82 |
| | | Belt Conveyor B3-BC1 | B3-DC1 | 2 | Limestone and Shale | 3.3 | 2,500 | 21,900,000 | 9.82E-04 | 21.51 |
| | | Belt Conveyor B4-BC1 | B3-DC2 | 1 | Limestone and Shale | 3.3 | 300 | 2,628,000 | 9.82E-04 | 1.29 |
| 004 | D-3 Finish Mill | Conveying equipment from clinker & gypsum storage | D3-DC8 | 1 | Gypsum & Clinker | 0.4 | 200 | 1,518,000 | 5.05E-02 | 38.35 |
| | | Conveying equipment from clinker & gypsum storage | D3-DC1 | 2 | Gypsum & Clinker | 0.4 | 130 | 1,138,800 | 5.05E-02 | 57.54 |
| | | Conveying bucket elevator D3-1-M1BE2 | D3-1-DC2 | 1 | Clinker, Gypsum, & Limestone | 0.4 | 410 | 3,591,600 | 5.05E-02 | 90.74 |
| 016 | Clinker & Additive Storage Operation | Clinker discharge ladder chute | H2-6-DC4 | 2 | Clinker | 0.2 | 200 | 1,752,000 | 1.30E-01 | 227.12 |
| | | Conveyors with covers | D3-DC9-A | 1 | Gypsum | 2.1 | 165 | 1,445,400 | 1.81E-03 | 1.31 |
| | | Conveyors with covers | D3-DC9 | 1 | Gypsum | 2.1 | 165 | 1,445,400 | 1.81E-03 | 1.31 |
| 017 | Finish Grinding Operation #1 | Conveying Equipment D3-F-FOW | D3-F-DC2 | 2 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 4.21 |
| | | Conveying Equipment D3-FD-1 | D3-DC1 | 7 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 14.73 |
| | | Conveying Equipment | D3-DC6 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| | | Conveying Equipment | D3-DC7 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| | | Clinker and Gypsum Conveying Equipment | FOW-1-DC1 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| | | Clinker and Gypsum Conveying Equipment | FOW-2-DC1 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| | | Clinker and Gypsum Conveying Equipment | FOW-3-DC1 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| | | Clinker and Gypsum Conveying Equipment | FOW-6-DC1 | 1 | Gypsum & Clinker | 0.4 | 25 | 219,000 | 1.92E-02 | 2.10 |
| 021 | Sampling System | Sampling Plant Conveying Equipment | B4-DC1 | 6 | Limestone | 1.6 | 125 | 262,500 | 2.68E-03 | 2.11 |
| | | Sampling Plant Conveying Equipment | B4-DC2 | 6 | Limestone | 1.6 | 125 | 262,500 | 2.68E-03 | 2.11 |
| | | Sample Return Cam Belt | C3-DC1 | 1 | Additive | 1.6 | 500 | 1,050,000 | 2.68E-03 | 1.41 |
| 022 | Limestone Storage & Reclaim System | Blend Rock Storage Pile Structure | C2-DC1 | 1 | Limestone | 1.6 | 500 | 4,380,000 | 2.68E-03 | 5.88 |
| | | Blend Rock Storage Pile Reclaim Vibrating Feeder C2-VF1 | C2-DC2A | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| | | Reclaim Belt Conveyor C2-BC1 | C2-DC2A | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| | | Manual Reclaim Vibrating Feeder C2-VF2 | C2-DC2B | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| | | Reclaim Belt Conveyor C2-BC1 | C2-DC2B | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| | | Roller Mill Storage Feed Belt Conveyor C2-BC2 | C2-DC3 | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| | | Roller Mill Storage Feed Belt Conveyor C2-BC2 | C2-DC4 | 1 | Limestone | 1.6 | 500 | 3,615,500 | 2.68E-03 | 4.85 |
| 023 | Additive System | Take-Away Belt Conveyor C4-BC1 | C4-DC1 | 1 | Shale, Clay, Silica & Iron Ore | 4.9 | 500 | 1,846,000 | 5.58E-04 | 0.52 |
| | | Take-Away Belt Conveyor C4-BC1 | C4-DC2 | 1 | Shale, Clay, Silica & Iron Ore | 4.9 | 500 | 1,846,000 | 5.58E-04 | 0.52 |
| | | Roller Mill Storage Silos Belt Conveyor C3-BC1 | C3-DC1 | 1 | Additive | 1.6 | 500 | 1,846,000 | 2.68E-03 | 2.48 |
| | | Roller Mill storage silos belt conveyor C3-BC1 | C3-DC2 | 2 | Shale, Clay, Silica & Iron Ore | 4.9 | 2,500 | 9,230,000 | 5.58E-04 | 5.15 |
| | | Silo Transport Conveyor Belt C3-BC2 | C3-DC2 | 2 | Shale, Clay, Silica & Iron Ore | 4.9 | 2,500 | 9,230,000 | 5.58E-04 | 5.15 |
| | | Emergency Conveyor B5-TS2 | B5-DC1 | 4 | Shale, Clay, Silica & Iron Ore | 4.9 | 500 | 1,846,000 | 5.58E-04 | 2.06 |

**Table 2. CAM Uncontrolled Drop Emission Calculations**

| Emission Unit | Unit Description | Equipment ID | Control Device | Number of Drops[1,2,3] | Material[2] | Moisture Content[2] (w/w%) | Throughput[4,5] (ton/hr) | Throughput[4,5] (tpy) | Uncontrolled $PM_{10}$ Emission Factor[6,7] (lb/ton) | Uncontrolled $PM_{10}$ Emissions[8] (tpy) |
|---|---|---|---|---|---|---|---|---|---|---|
| 024 | Roller Mill System | Vibrating feeders (D2-6-VF1 through VF4) | D2-6-DC1A, DC1B, and DC1C | 4 | Limestone | 1.6 | 70 | 613,200 | 2.68E-03 | 3.29 |
| | | Material Reclaim Weigh Feeders (D2-6-WF1 through WF7) | D2-6-DC1A, DC1B, and DC1C | 7 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 59 | 520,594 | 1.50E-03 | 2.74 |
| | | Screw Conveyors (D2-6-SC1 through SC7) | D2-6-DC1A, DC1B, and DC1C | 7 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 59 | 520,594 | 1.50E-03 | 2.74 |
| | | Four Vibrating Feeders (C5-VF1 through VF4) | C5-DC1A, DC1B, and | 4 | Limestone | 1.6 | 88 | 766,500 | 2.68E-03 | 4.11 |
| | | Material Reclaim Weigh Feeders (C5-WF1 through WF7) | C5-DC1A, DC1B, and DC1C | 7 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 221 | 1,939,714 | 1.50E-03 | 10.22 |
| | | Screw Conveyors (C5-SC1 through SC7) | C5-DC1A, DC1B, and DC1C | 7 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 221 | 1,939,714 | 1.50E-03 | 10.22 |
| | | Material Reclaim Conveyor Belt D2-6-BC1 | D2-7-DC1 | 1 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 533 | 4,669,080 | 1.50E-03 | 3.51 |
| | | Reclaim Transport Conveyor Belt C5-BC1 | D2-7-DC1 | 1 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 346 | 3,030,960 | 1.50E-03 | 2.28 |
| | | D2-7-DC1 Dust Stream to Transport Conveyor Belt D2-7-BC1 | D2-7-DC1 | 1 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 684 | 5,991,840 | 1.50E-03 | 4.51 |
| | | Transport Conveyor Belts D2-7-BC1 to D2-7-BC2 | D2-7-DC2 | 5 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 624 | 5,466,240 | 1.50E-03 | 20.56 |
| | | Transport Conveyor Belts | D2-7-DC4 | 3 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 102 | 893,520 | 1.50E-03 | 2.02 |
| | | Raw Mill Reject Recirculation System (D2-7-B2 through D2-7-DG2) | D2-7-DC3 | 4 | Limestone, Shale, Clay, Silica & Iron Ore | 2.4 | 202 | 1,769,520 | 1.50E-03 | 5.33 |
| 027 | Clinker Cooling System | Clinker Drag Conveyor Belt H2-6-DCR2 | H2-6-DC3 | 2 | Clinker | 0.2 | 200 | 1,518,000 | 1.30E-01 | 196.78 |
| | | Clinker Drag Conveyor Belt H2-6-DCR3 | H2-6-DC3 | 1 | Clinker | 0.2 | 200 | 1,518,000 | 1.30E-01 | 98.39 |
| | | Clinker Bucket Elevator H2-6-BE1 | H2-6-DC3 | 1 | Clinker | 0.2 | 200 | 1,518,000 | 1.30E-01 | 98.39 |
| | | Clinker Belt Conveyor H2-6-BC1 | H2-6-DC3 | 1 | Clinker | 0.2 | 200 | 1,518,000 | 1.30E-01 | 98.39 |
| 054 | Bulk Clinker Truck Loadout Operation | Conveying equipment from clinker & gypsum storage | D3-DC8 | 1 | Gypsum & Clinker | 0.4 | 200 | 1,518,000 | 5.05E-02 | 38.35 |
| 059 | Finish Grinding Operation #6 | Conveying equipment from clinker, gypsum and limestone feed bins | D3-FM6-DC2 | 1 | Gypsum & Clinker | 0.4 | 60 | 525,600 | 5.05E-02 | 13.28 |
| | | Conveying equipment from clinker, gypsum and limestone feed bins | D3-F6-DC3 | 6 | Clinker, Gypsum, & Limestone | 0.4 | 60 | 525,600 | 5.05E-02 | 79.68 |
| 065 | Finish Mill System | Clinker Weigh Feeders D4-1-WF1 and D4-1-WF2 | D4-1-DC3 | 2 | Clinker | 0.2 | 250 | 2,190,000 | 1.30E-01 | 283.90 |
| | | Gypsum/Mineral Addition Feeders D4-1-WF3 and D4-1-WF4 | D4-1-DC3 | 2 | Clinker, Gypsum, & Limestone | 0.4 | 250 | 2,190,000 | 5.05E-02 | 110.66 |
| | | Gypsum/Clinker/Mineral Addition Conveyor D4-1-BC1 | D4-1-DC3 | 1 | Clinker, Gypsum, & Limestone | 0.4 | 250 | 2,190,000 | 5.05E-02 | 55.33 |
| | | Gypsum/Clinker/Mineral Addition Conveyor D4-1-BC1 | D4-1-DC4 | 1 | Clinker, Gypsum, & Limestone | 0.4 | 250 | 2,190,000 | 5.05E-02 | 55.33 |
| 070 | Packhouse Bulk Truck Loadout Operation | Additive Storage Silo | Additive Storage Silo Bin Vent | 1 | Cement & Aggregate | 0.4 | 200 | 1,752,000 | 4.30E-02 | 37.66 |

1. Number of associated drops per Facility process flow diagrams.
2. Material controlled by each baghouse and associated material moisture content per Facility TEIR, permits, and process flow diagrams.
3. The number of drop points for unit 024 was derived from dividing the total number of drop points by the 3 dust collectors (D2-6-DC1 (A, B, and C)) controlling the equipment.
4. Throughput based on conservative estimates from process flow diagrams and engineering estimates assuming a facility clinker production maximum of 1,518,000 tons clinker.
5. Throughput (tpy) = Throughput (ton/hr) x 8,760 hours/year
6. With the exception of the crushers and screeners, uncontrolled Emission Factor (lb/ton) = Particle Size Multiplier x 0.0032 x (Mean Wind Speed (mph)/5)$^{1.3}$ / (Material Moisture Content (%)/2)$^{1.4}$ per AP-42 Chapter 13.2.4, Equation 1.
Mean Wind Speed 7.7 mph
Particulate Size Multipliers:

| Material | $PM_{10}$ | Reference |
|---|---|---|
| General | 0.35 | AP-42 Chapter 13.2.4 |
| Cement | 0.92 | Yang, Wenli. PM Size and Chemical Speciation Profile for Concrete Batching - PM3431. Air Resources Board. October 22, 2013 |
| Clinker | 0.92 | Assumed equal to cement |

7. Per Table 11.19.2-2 of AP-42, uncontrolled emission factors for primary crushing screening.
8. Uncontrolled Emissions (tpy) = Uncontrolled Emission Factor (lb/ton) x Throughput (tons/yr) / 2,000 (lb/ton)

# CAM Applicability Analysis

Table 4. Detailed CAM Applicability Analysis

| Permit Unit | Unit Description | Pollutant | Control Device Used? | Control Device # | Control Device Inherent to the Process? (Y/N) | Federally Enforceable Emission Limit or Standard | Reference | Continuous Compliance Determination Method? | Is Limit or Standard post 11/15/90? | Uncontrolled Potential to Emit (PTE) | | | Subject to CAM? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | PTE (tpy) | Above Major Source Threshold? | Reference | Yes/No | Reason |
| 001 | Primary Crusher Operation | $PM_{10}$ | Yes | B2-DC1 | N | 3.99 lb/hr<br>95.66 lb/day<br>0.015 gr/scf | Rule 210.1<br>Rule 404.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00<br>Rule 404.1:<br>Adopted 4/18/72<br>Amended 1/24/07 | 101.40 | Yes | See Table 2 | Yes | CAM applies per 40 CFR 64.2 as the pre-control potential emissions are greater than the major source threshold of 100 tpy for $PM_{10}$. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64. |
| | | | | B2-DC2 | N | 0.64 lb/hr<br>15.43 lb/day<br>0.015 gr/scf | Rule 210.1<br>Rule 404.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00<br>Rule 404.1:<br>Adopted 4/18/72<br>Amended 1/24/07 | 7.31 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | B3-DC1 | N | 1.16 lb/hr<br>27.77 lb/day<br>0.015 gr/scf | Rule 210.1<br>Rule 404.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00<br>Rule 404.1:<br>Adopted 4/18/72<br>Amended 1/24/07 | 45.33 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C3-DC1 | N | See Permit Unit 023 | See Permit Unit 023 | See Permit Unit 023 | See Permit Unit 023 | 3.89 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | B3-DC2 | N | 1.80 lb/hr<br>43.20 lb/day<br>0.015 gr/scf | Rule 210.1<br>Rule 404.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00<br>Rule 404.1:<br>Adopted 4/18/72<br>Amended 1/24/07 | 1.29 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C2-DC1 | N | See Permit Unit 022 | See Permit Unit 022 | See Permit Unit 022 | See Permit Unit 022 | 5.88 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 004 | D-3 Finish Mill | $PM_{10}$ | Yes | D3-DC8 | N | 3.86 lb/hr<br>92.57 lb/day<br>15.57 ton/year<br>0.075 gr/scf | Rule 210.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00 | 76.71 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-DC1 | N | 3.86 lb/hr<br>92.57 lb/day<br>15.57 ton/year<br>0.075 gr/scf | Rule 210.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00 | 72.28 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-1-DC2 | N | 0.51 lb/hr<br>12.34 lb/day<br>2.08 ton/year<br>0.010 gr/scf | Rule 210.1 | None | Rule 210.1:<br>Adopted 3/19/74<br>Amended 5/4/00<br>Rule 404.1:<br>Adopted 4/18/72<br>Amended 1/24/07 | 90.74 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-1-M1-DC1 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-1-M2-DC1 | Y | N/A | | | | | | | | |
| | | | | D3-1-M3-DC1 | Y | N/A | | | | | | | | |
| | | | | D3-1-DC1 | Y | N/A | | | | | | | | |
| | | | | D3-M4-DC1 | Y | N/A | | | | | | | | |
| | | | | D3-M5-DC1 | Y | N/A | | | | | | | | |
| 010 | Coal Supply System | $PM_{10}$ | Yes | H7-6-CM2-DC1 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | Receiver | Y | N/A | | | | | | | | |
| 016 | Clinker & Additive Storage Operation | $PM_{10}$ | Yes | H2-6-DC4 | N | 1.03 lb/hr<br>24.69 lb/day<br>4.51 ton/year<br>0.01 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 227.12 | Yes | See Table 2 | Yes | CAM applies per 40 CFR 64.2 as the pre-control potential emissions are greater than the major source threshold of 100 tpy for $PM_{10}$. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64. |
| | | | | D3-DC9-A | N | 2.59 lb/hr<br>62.03 lb/day<br>11.32 ton/year | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 1.31 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-DC9 | N | 0.02 lb/hr<br>0.55 lb/day<br>0.10 ton/year | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 1.31 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |

**Table 4. Detailed CAM Applicability Analysis**

| Permit Unit | Unit Description | Pollutant | Control Device Used? | Control Device # | Control Device Inherent to the Process? (Y/N) | Federally Enforceable Emission Limit or Standard | Reference | Continuous Compliance Determination Method? | Is Limit or Standard post 11/15/90? | Uncontrolled Potential to Emit (PTE) | | | Subject to CAM? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | PTE (tpy) | Above Major Source Threshold? | Reference | Yes/No | Reason |
| 017 | Finish Grinding Operation #1 | $PM_{10}$ | Yes | FM-1-DC1 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-F-DC2 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 4.21 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-DC1 | N | See Permit Unit 017 | See Permit Unit 017 | See Permit Unit 017 | See Permit Unit 017 | 72.28 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-DC2 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-DC3 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-DC4 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-DC5 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-DC6 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-DC7 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | FOW-1-DC1 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | FOW-2-DC1 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | FOW-3-DC1 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | FOW-6-DC1 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72 Amended 01/24/2007 | 2.10 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 018 | Packhouse & Loading Facilities | $PM_{10}$ | Yes | PH-N1-SP2 | Y | N/A | N/A | | | N/A | | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | PH-N1-SP1 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-1 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-2 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-3 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-4 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-5 | Y | N/A | | | | | | | No | |
| | | | | PHI-DC-6 | Y | N/A | | | | | | | No | |
| | | | | PH-I-N2-DC-1 | Y | N/A | | | | | | | No | |
| | | | | PH-I-N3-DC-1 | Y | N/A | | | | | | | No | |
| | | | | PH-I-DC-7 | Y | N/A | | | | | | | No | |
| | | | | PH-E6-DC | Y | N/A | | | | | | | No | |
| | | | | PH-E6-DC-1 | Y | N/A | | | | | | | No | |
| | | | | PH-I-DC-2A | Y | N/A | | | | | | | No | |
| 020 | Aboveground Gasoline Storage and Dispensing System | N/A | Yes | Vapor Recovery System | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply per 40 CFR 64.2(a)(1) and (a)(2) as the unit is not subject to an emission limit or standard for which a control device is used to achieve compliance. |
| 021 | Sampling System | $PM_{10}$ | Yes | B4-DC1 | N | 1.67 lb/hr 40.08 lb/day 1.75 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 2.11 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | B4-DC2 | N | 0.06 lb/hr 1.44 lb/day 0.06 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 2.11 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C3-DC1 | N | 1.67 lb/hr 40.08 lb/day 1.75 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 3.89 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 022 | Limestone Storage & Reclaim System | $PM_{10}$ | Yes | C2-DC1 | N | 3.86 lb/hr 92.64 lb/day 16.91 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 5.88 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C2-DC2A | N | 0.52 lb/hr 12.48 lb/day 1.88 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 9.70 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C2-DC2B | N | 0.52 lb/hr 12.48 lb/day 1.88 ton/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 9.70 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C2-DC3 | N | 0.51 lb/hr 12.24 lb/day 1.84 tons/year 0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 4.85 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C2-DC4 | N | 0.96 lb/hr 23.04 lb/day 3.47 tons/year 0.015 gr/year | Rule 210.1 | None | Adopted 3/19/74 Amended 5/4/00 | 4.85 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |

**Table 4. Detailed CAM Applicability Analysis**

| Permit Unit | Unit Description | Pollutant | Control Device Used? | Control Device # | Control Device Inherent to the Process? (Y/N) | Federally Enforceable Emission Limit or Standard | Reference | Continuous Compliance Determination Method? | Is Limit or Standard post 11/15/90? | Uncontrolled Potential to Emit (PTE) | | | Subject to CAM? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | PTE (tpy) | Above Major Source Threshold? | Reference | Yes/No | Reason |
| 023 | Additive System | $PM_{10}$ | Yes | C4-DC1 | N | 0.77 lb/hr<br>18.48 lb/day<br>1.42 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 0.52 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C4-DC2 | N | 0.08 lb/hr<br>1.92 lb/day<br>0.15 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 0.52 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C3-DC1 | N | 1.67 lb/hr<br>40.08 lb/day<br>3.08 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 3.89 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C3-DC2 | N | 2.06 lb/hr<br>49.44 lb/day<br>3.80 ton/year<br>0.015 gr/year | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 10.30 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | B5-DC1 | N | 0.32 lb/hr<br>7.68 lb/day<br>0.59 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 2.06 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 024 | Roller Mill System | $PM_{10}$ | Yes | D2-6-DC1A, DC1B, and DC1C | N | 0.99 lb/hr<br>23.76 lb/day<br>3.58 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 8.77 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | C5-DC1A, DC1B, and DC1C | N | 0.99 lb/hr<br>23.76 lb/day<br>3.58 ton/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 24.55 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D2-6-DC2 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D2-6-DC3 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D2-7-DC1 | N | 0.1 gr/scf | Rule 404.1 | None | Adopted 4/18/72<br>Amended 01/24/2007 | 10.30 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D2-7-DC2 | N | 0.43 lb/hr<br>10.24 lb/day<br>1.87 tons/year<br>0.005 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 20.56 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D2-7-DC3 | N | 0.43 lb/hr<br>10.29 lb/day<br>1.88 tons/year<br>0.005 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 5.33 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D2-7-DC4 | N | 0.43 lb/hr<br>10.29 lb/day<br>1.88 tons/year<br>0.005 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 2.02 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D2-7-DC5 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| 025 | Homogenizing & Kiln Feed System | $PM_{10}$ | Yes | F3-6-DC1 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | H4-6-DC2 | Y | N/A | | | | | | | No | |
| | | | | H4-6-DC1 | Y | N/A | | | | | | | No | |
| 026 | Pyroprocessing System | $PM_{10}$ | Yes | Beneficiation Collector H6-6-DC1 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | Loadout Collector H6-6-DC2 | Y | N/A | | | | | | | No | |
| | | | | Surge Bin Collector H6-6-DC3 | Y | N/A | | | | | | | No | |
| | | | | Coal Mill Collector H7-6-DC1 | Y | N/A | | | | | | | No | |
| | | | | Kiln #6 Collector H5-6-DC1 | Y | N/A | | | | | | | No | |
| | | | | D2-6-DC2 | Y | N/A | | | | | | | No | |
| | | | | D2-6-DC3 | Y | N/A | | | | | | | No | |
| | | | | H4-6-DC1 | Y | N/A | | | | | | | No | |
| | | | | H4-6-DC2 | Y | N/A | | | | | | | No | |
| | | | | F3-6-DC1 | Y | N/A | | | | | | | No | |
| | | | | (Lime Storage) | Y | N/A | | | | | | | No | |
| | | | | D2-6-DC1 | N | See Permit Unit 024 (D2-6-DC1A, DC1B, and DC1C) | See Permit Unit 024 | See Permit Unit 024 | See Permit Unit 024 | 8.77 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | $SO_2$ | Yes | Hydrated Lime Injection System | N/A | 2,698.08 tpy | Rule 210.1 | Yes | Not necessary to evaluate. This unit is subject to a continuous compliance determination method under the current Title V PTO. | | N/A | | No | CAM does not apply per 40 CFR 64.2(b)(vi) as the unit is subject to a continuous compliance determination method under the current Title V PTO. |
| | | $NO_2$ | Yes | SNCR | N/A | 3,744.90 tpy | Rule 210.1 | Yes | | | N/A | | No | |
| | | VOC | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | CO | No | N/A | N/A | N/A | | | | | | | No | |
| 027 | Clinker Cooling System | $PM_{10}$ | Yes | H2-6-DC1 | N | 24.69 lb/hr<br>592.56 lb/day<br>108.14 tons/year<br>0.015 gr/scf | Rule 210.1 | Yes | Not necessary to evaluate. The unit is subject to a continuous compliance determination method under the current Title V PTO. | | N/A | | No | CAM does not apply per 40 CFR 64.2(b)(vi) as the unit is subject to a continuous compliance determination method under the current Title V PTO. |
| | | | | H2-6-DC3 | N | 0.90 lb/hr<br>21.60 lb/day<br>3.94 tons/year<br>0.015 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 491.96 | Yes | See Table 2 | Yes | CAM applies per 40 CFR 64.2 as the pre-control potential emissions are greater than the major source threshold of 100 tpy for $PM_{10}$. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64. |

Table 4. Detailed CAM Applicability Analysis

| Permit Unit | Unit Description | Pollutant | Control Device Used? | Control Device # | Control Device Inherent to the Process? (Y/N) | Federally Enforceable Emission Limit or Standard | Reference | Continuous Compliance Determination Method? | Is Limit or Standard post 11/15/90? | Uncontrolled Potential to Emit (PTE) | | | Subject to CAM? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | PTE (tpy) | Above Major Source Threshold? | Reference | Yes/No | Reason |
| 032 | Standby Piston Engine with Generator | PM | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 033 | Standby Piston Engine with Generator | PM | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 042 | Piston Engine with Welder | PM | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 044 | Piston Engine with Compressor | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 048 | Piston Engine | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 049 | Piston Engine with Washer | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 051 | Vacuum Truck | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 053 | Kiln Engine | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 054 | Bulk Clinker Truck Loadout Operation | $PM_{10}$ | Yes | D3-DC8 | N | 0.34 lb/hr<br>8.23 lb/day<br>1.50 tons/year<br>0.008 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 76.71 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 055 | Finish Grinding Operation #2 | $PM_{10}$ | Yes | FM-2-DC1 | Y | N/A | | N/A | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| 056 | Finish Grinding Operation #3 | $PM_{10}$ | Yes | D3-F3-DC1 | Y | N/A | | N/A | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| 057 | Finish Grinding Operation #4 | $PM_{10}$ | Yes | D3-F4-DC1 | Y | N/A | | N/A | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| 058 | Finish Grinding Operation #5 | $PM_{10}$ | Yes | D3-F5-DC1 | Y | N/A | | N/A | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| 059 | Finish Grinding Operation #6 | $PM_{10}$ | Yes | D3-F6-DC3 | N | 0.07 lb/hr<br>1.66 lb/day<br>0.30 tons/year<br>0.01 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 79.68 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D3-FM6-DC1 | Y | N/A | | N/A | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-FM6-DC2 | N | 5.14 lb/hr<br>123.43 lb/day<br>22.53 tons/year<br>0.01 gr/scf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 13.28 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| 061 | Portable Crushing Plant | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| 062 | Paint Spray Operation | VOC | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| 063 | Quarry Drill #1 | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 064 | Quarry Drill #2 | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | N/A | | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |

Table 4. Detailed CAM Applicability Analysis

| Permit Unit | Unit Description | Pollutant | Control Device Used? | Control Device # | Control Device Inherent to the Process? (Y/N) | Federally Enforceable Emission Limit or Standard | Reference | Continuous Compliance Determination Method? | Is Limit or Standard post 11/15/90? | Uncontrolled Potential to Emit (PTE) | | | Subject to CAM? | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | PTE (tpy) | Above Major Source Threshold? | Reference | Yes/No | Reason |
| 065 | Finish Mill System | $PM_{10}$ | Yes | D4-1-DC3 | N | 0.13 lb/hr<br>3.10 lb/day<br>0.56 ton/yr<br>0.01 gr/acfm | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 449.89 | Yes | See Table 2 | Yes | CAM applies per 40 CFR 64.2 as the pre-control potential emissions are greater than the major source threshold of 100 tpy for $PM_{10}$. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64. |
| | | | | D4-1-DC4 | N | 0.26 lb/hr<br>6.17 lb/day<br>1.13 ton/yr<br>0.01 gr/acfm | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 55.33 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | D4-1-DC2 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D4-1-DC1 | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | D3-1-DC10 | Y | N/A | | | | | | | | |
| | | | | D3-1-DC11 | Y | N/A | | | | | | | | |
| | | SO2 | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | NO2 | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 066 | Sweeper #1 | PM | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| 068 | Vacuum Truck | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | SO2 | No | | | | | | | | | | | |
| | | NO2 | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |
| 069 | Portable Crushing Operation | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| 070 | Concrete Batch Plant | $PM_{10}$ | Yes | Additive Storage Silo Bin Vent | N | 0.02 lb/hr<br>0.26 lb/day<br>0.05 tons/year<br>0.01 gr/acf | Rule 210.1 | None | Adopted 3/19/74<br>Amended 5/4/00 | 37.66 | No | See Table 2 | No | CAM does not apply per 40 CFR 64.2 as the pre-control potential emissions for all emission units controlled by this baghouse are less than the major source threshold of 100 tpy for $PM_{10}$. |
| | | | | Cement Storage Silo Bin Vent | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | Truck Loadout | Y | N/A | | | | | | | | |
| 071 | Concrete Storage Guppy | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| 072 | Vacuum Truck | $PM_{10}$ | Yes | Dust Collector | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control device is inherent to the process. |
| 073 | Packhouse Bulk Truck Loadout Operation | $PM_{10}$ | Yes | Bin Vent Dust Collector | Y | N/A | N/A | | | | N/A | | No | CAM does not apply because the control devices are inherent to the process. |
| | | | | PH-1-N5-SP1-DC Dust Collector | Y | N/A | | | | | | | | |
| | | | | PH-1-N5-SP2-DC Dust Collector | Y | N/A | | | | | | | | |
| 074 | Compressor | $PM_{10}$ | No | N/A | N/A | N/A | N/A | | | | N/A | | No | CAM does not apply because there are no control devices used to comply with a federal emission standard. |
| | | $SO_2$ | No | | | | | | | | | | | |
| | | $NO_2$ | No | | | | | | | | | | | |
| | | VOC | No | | | | | | | | | | | |
| | | CO | No | | | | | | | | | | | |

# Emission Units Subject to CAM

**Table 5. Emission Units Subject to 40 CFR 64, Compliance Assurance Monitoring Rule**

| Equipment Permit ID | Pollutant | Control Device ID | Affected Source Type | Applicable Rules | Applicable Emission Limits | Portland Cement NESHAP Available | NSPS Applicable |
|---|---|---|---|---|---|---|---|
| 1003001 | $PM_{10}$ | B2-DC1 | Primary Crusher Operation | 40 CFR 60 Subpart OOO<br>Rule 210.1<br>Rule 404.1<br>Rule 422 | 10% opacity (40 CFR 60 Subpart OOO)<br>0.015 gr/scf; 3.99 lb/hr; 95.66 lb/day (Rule 210.1)<br>0.1 gr/scf (Rule 404.1) | No | Yes §60.672 Standards for particulate matter (PM), Table 3 to Subpart OOO of Part 60 - Fugitive Emission Limits. |
| 1003016 | $PM_{10}$ | H2-6-DC4 | Clinker & Additive Storage Operation | 40 CFR 60 Subpart F<br>40 CFR 63 Subpart LLL<br>Rule 210.1<br>Rule 401.1<br>Rule 422 | 10% opacity (40 CFR 60 Subpart F and 40 CFR 63 Subpart LLL)<br>0.01 gr/scf; 1.03 lb/hr; 24.69 lb/day; 4.51 ton/yr (Rule 210.1)<br>0.1 gr/scf (Rule 404.1) | Yes §63.1345 Emission limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers | Yes §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. |
| 1003027 | $PM_{10}$ | H2-6-DC3 | Clinker Cooling System | 40 CFR 60 Subpart F<br>40 CFR 63 Subpart LLL<br>Rule 210.1<br>Rule 401.1<br>Rule 422 | 10% opacity (40 CFR 60 Subpart F and 40 CFR 63 Subpart LLL)<br>0.015 gr/scf; 0.90 lb/hr; 21.60 lb/day; 3.94 ton/yr (Rule 210.1)<br>0.1 gr/scf (Rule 404.1) | Yes §63.1345 Emission limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers | Yes §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. |
| 1003065 | $PM_{10}$ | D4-1-DC3 | Finish Mill System | 40 CFR 60 Subpart F<br>40 CFR 63 Subpart LLL<br>Rule 210.1<br>Rule 401.1<br>Rule 422 | 10% opacity (40 CFR 60 Subpart F and 40 CFR 63 Subpart LLL)<br>0.01 gr/scf; 0.13 lb/hr; 3.10 lb/day; 0.56 ton/yr (Rule 210.1)<br>5% opacity (Rule 210.1)<br>0.1 gr/scf (Rule 404.1) | Yes §63.1345 Emission limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers | Yes §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. |

## EASTERN KERN AIR POLLUTION CONTROL DISTRICT – TITLE V

# 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: CalPortland Mojave
2. TITLE V FACILITY NUMBER: 1003-V-2000
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[4] | Uncontrolled Emissions | | Connected to Control Unit Permit or Equipment No. | Control Equipment Description[4] | Controlled Emissions | |
|---|---|---|---|---|---|---|---|
| | | Pollutant | PTE[5] (tons/year) | | | Pollutant | PTE[5] (tons/year) |
| 1003001 | Vibrating grizzly B2-VG1 | PM10 | 76.21 | 1003001 | B2-DC1 | PM10 | 17.47* |
| 1003001 | Impact Crusher B2-IC1 | PM10 | 17.87 | 1003001 | B2-DC1 | PM10 | |
| 1003001 | Belt Conveyor B2-BC1 | PM10 | 7.31 | 1003001 | B2-DC1 | PM10 | |
| 1003016 | Clinker Discharge Ladder Chute | PM10 | 227.12 | 1003016 | H2-6-DC4 | PM10 | 4.51* |
| 1003027 | Conveyor Belt H2-6-DCR2 | PM10 | 196.78 | 1003027 | H2-6-DC3 | PM10 | 3.94* |
| 1003027 | Conveyor Belt H2-6-DCR3 | PM10 | 98.39 | 1003027 | H2-6-DC3 | PM10 | |
| 1003027 | Bucket Elevator H2-6-BE1 | PM10 | 98.39 | 1003027 | H2-6-DC3 | PM10 | |
| 1003027 | Belt Conveyor H2-6-BC1 | PM10 | 98.39 | 1003027 | H2-6-DC3 | PM10 | |
| 1003065 | Weigh Feeders D4-1-WF(1-2) | PM10 | 283.90 | 1003065 | D4-1-DC3 | PM10 | 0.56* |
| 1003065 | Addition Feeders D4-1-WF(3-4) | PM10 | 110.66 | 1003065 | D4-1-DC3 | PM10 | |
| 1003065 | Conveyor D4-1-BC1 | PM10 | 55.33 | 1003065 | D4-1-DC3 | PM10 | |

[1] For more detailed information regarding CAM applicability, refer to 40 CFR Part 64, Section 64.1.
[2] 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, on plan is required for each control device.
[3] 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.
[4] Provide brief description (equipment type, make, model and serial number) of the emissions units and control devices as appropriate.
[5] Potential to Emit



*Represents emissions from all equipment controlled by the control device

# 40 CFR 64 CAM Requirements

Pursuant to 40 CFR §64.4(a) Lehigh Cement West will comply with the performance criteria listed in the table below for the $PM_{10}$ emissions from the PSEUs listed in Table 1.

| **POLLUTANT:** $PM_{10}$ | **INDICATOR:** Pressure Drop/Stack Observations | **INDICATOR:** Inspections and Maintenance |
|---|---|---|
| **GENERAL CRITERIA** | | |
| Monitoring approach used to measure the indicator: | Pressure differential readings when the PSEU is in operation will be performed daily. Readings outside of the indicator range trigger a visible emissions observation using EPA Method 22. For PSEUs subject to NESHAP LLL, the duration of each M22 visible emissions check shall consist of a minimum ten-minute visible emissions check. For PSEUs not subject to NESHAP LLL, the duration of each M22 visible emissions check shall consist of a minimum six-minute visible emissions check. Visible emissions observed during an M22 check trigger an opacity observation using EPA Method 9 (M9). | Preventative maintenance inspections of the PSEU will be performed monthly. |
| Appropriate indicator range or the procedure for establishing the indicator range which provides a reasonable assurance of compliance: | Indicator range is a pressure drop reading between 2 and 8 in. $H_2O$. An excursion is defined as any reading outside of the indicator range. An excursion triggers a visible emissions observation using EPA Method 22. The presence of visible emissions during an M22 observation triggers an M9 opacity observation, inspection, corrective action, and recordkeeping. The Quality Improvement Plan (QIP) threshold is 30% of visual emissions check where visual emissions are identified during a 6-month period. If the QIP threshold is exceeded, a QIP will be developed and implemented. | An excursion is defined as a failure to perform the monthly maintenance inspection. Excursions trigger an inspection, corrective action, and recordkeeping. |
| **PERFORMANCE CRITERIA** | | |
| Specifications for obtaining representative data: | Differential pressure gauge measures the pressure drop across the baghouse from the baghouse inlet to exhaust. The minimum accuracy of the device is ±0.1 in. $H_2O$. Visible emissions measurements are made at baghouse exhaust while the baghouse is operating by trained observers. | The monthly maintenance inspections will be performed by trained Facility personnel. |
| Verification procedures to confirm the operational status of the monitoring data: | The pressure gauge will be inspected monthly as a part of preventative maintenance. No monitoring equipment involved for Method 22 or Method 9 observations; verification is by ongoing training of VE observers. | The pressure gauge will be inspected monthly as a part of preventative maintenance. |
| QA/QC Practices | Method 22 and Method 9 observers must be certified as a qualified observer. | The pressure gauge will be inspected monthly as a part of preventative maintenance. |
| Monitoring frequency: | Differential pressure gauge is installed and continuously operational. Pressure drop is manually recorded daily. | Preventative maintenance inspections of the PSEU will be performed monthly. Pressure drop is manually recorded as a part of this monthly inspection. Maintenance is performed on an as-needed basis. |
| Data collection procedures: | Pressure drop is manually recorded daily. The visible emission observation is documented by the observer. | Pressure drop is recorded monthly as a part of the manual PSEU inspection. |
| Data averaging period: | N/A | N/A |

Pursuant to 40 CFR §64.4(b), the following justification has been provided for the proposed monitoring elements:

**INDICATORS AND THE MONITORING APPROACH:**

- Visible emissions: Opacity was selected as the primary performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, there should be no visible emissions from the exhaust. Any increase above that level opacity indicates reduced performance of a particulate control device (even though that device may still be below its mass emission rate limit); therefore, this modified method for observing visible emissions is a suitable performance indicator.
- Pressure Drop/Inspection and Maintenance: Pressure drop was selected as an additional performance indicator because the pressure differential across the bag is indicative of operation of the baghouse in a manner necessary to comply with the particulate emission standard. When the baghouse is operating properly, the pressure differential should fall within the specified indicator range. The differential pressure gauge will operate continuously, and manual readings will take place as a part of a monthly inspection of the baghouse. As specified in Appendix B of the Compliance Assurance Monitoring Technical Guidance Document, periodic inspections and maintenance can be an effective addition to a monitoring plan. As such, monthly preventative maintenance inspections including a manual reading of the pressure differential are a suitable performance indicator.[1]

**RATIONALE AND JUSTIFICATION:**

- When an excursion occurs, corrective action will be initiated beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and all exceedances of the QIP threshold will be reported in accordance with 40 CFR Part 64 requirements.

Pursuant to 40 CFR §64.7(a), Lehigh Cement West shall conduct the monitoring required under this plan upon issuance of the Title V Permit for the PSEUs listed in Table 1.

Pursuant to 40 CFR §64.7(b), Lehigh Cement West shall maintain the monitoring required under this part at all times.

Pursuant to 40 CFR §64.7(c), Lehigh Cement West will conduct monitoring at the required intervals at all times that the PSEUs are operating.

# Appendix C

## Greenhouse Gas Facility Wide Reporting

**Greenhouse Gases:**
Carbon dioxide ($CO_2$),
Nitrous oxide ($N_2O$),
Methane ($CH_4$),
Hydrofluorocarbons (HFCs),
Perfluorocarbons (PFCs), and
Sulfur Hexafluoride ($SF_6$).

Reported for the year 2019

| **GHG EMISSIONS** (short tons per year) | | | | | | | |
|---|---|---|---|---|---|---|---|
| Pollutants: | $CO_2$ | $CH_4$ | $N_2O$ | HFCs | PFCs | $SF_6$ | Total |
| Emissions (tpy): | 1,120,361 | | | N/A | N/A | N/A | |
| *GWP: | 1 | 21 | 310 | ** | ** | 23,900 | |
| CO2e (tpy): | 1,120,361 | 1,986 | 4,271 | N/A | N/A | N/A | 1,120,361 |

*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 CO2. 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

*Reminder of this page intentionally left blank.*