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 Field Office: (661) 823-9264

Permittee: Tehachapi Cement Plant

Location: 13573 E. Tehachapi Blvd.

Tehachapi, California 93561

Permit No: 1221-V-2000-2026

Mailing Address: 13573 E. Tehachapi Boulevard

Tehachapi, California 93561

Issuance Date: XX XX, 2024

Expiration Date: XX XX, 2029

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

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General Permit Conditions

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

	Federally Enforceable Conditions	Reg/Rule
1.	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.	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. 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 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		
	A. Permittee shall comply with all permit conditions;	Rule 201.1	
	B. Permit does not convey any property rights or any exclusive privilege;		
	C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;		
	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;		
	E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and		
	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.		
5.	Emergency Provisions	Reg. II,	
	A. The permittee shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection V.J., Page 201.1-27, all District-only rules which apply in accordance with Subsection V.K.1., Page 201.1-28, and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;	Rule 201.1 Section VI. B.12	
	B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:		
	 An emergency occurred; The permittee can identify the cause(s) of the emergency; The facility was being properly operated at the time of the emergency; All steps were taken to minimize the emissions resulting from the emergency; and Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken; 		
	C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.		

	Fede	rally Enforceable Conditions	Reg/Rule
6.	A. F. v. S. 22 t. 1. 22 3. 3.	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: 1) Date, place, and time of sampling; 2) Operating conditions at time of sampling; 3) Date, place, and method of analysis; and 4) Results of analysis;	Reg. II, Rule 201.1
	ŗ	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	
	y S 2	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.	
7.	Repo	orting	Reg. II,
	e	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;	Rule 201.1
	r	Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to he APCO;	
		All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;	
		Progress report shall be made on a compliance schedule at least semi-annually and neluding:	
	2	Date when compliance will be achieved, Explanation of why compliance was not, or will not be achieved by the scheduled date, and Log of any preventative or corrective action taken; and	
		Each monitoring report shall be accompanied by a written statement from the esponsible official certifying the truth, accuracy, and completeness of the report.	

	Federally Enforceable Conditions	Reg/Rule
8.	Referencing of District and Applicable Requirements 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: A. Plant modernization project; and B. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment. 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
9.	 Right of Entry The source shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including: A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity; B. Inspection and duplication of records required by the permit to operate; and C. Source sampling or other monitoring activities. 	Reg. II, Rule 201.1
10.	Permit Life The life of this permit shall be five years from the date of issuance. Administrative Permit Amendment and Minor Permit Modification	Reg.II, Rule 201.1 Reg. II, Rule
12.	Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1. Applicability of Federally Enforceable Conditions 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.	201.1 Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
13.	Additional Monitoring 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. All control equipment shall be inspected annually for proper operation. Tehachapi Cement Plant shall maintain all records of control equipment maintenance for a period of five years. 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. Record keeping provisions associated with all monitoring requirements shall include the following information: A. Identification of stack or emission point being monitored; B. Operational conditions at the time of monitoring; 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 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.	Tehachapi Cement Plant shall conduct stack testing annually and at other times as specified by U.S. EPA or the District, in accordance with the methodology outlined in EPA Methods 5-8, 7E, 10, 18 or equivalent, to verify compliance with emission limits and the accuracy of any continuous in-stack monitors. The District and U.S. EPA shall be notified at least 30 days in advance of the testing to allow an observer to be present and the report of results shall be transmitted to the District as soon as they are available. (PSD Permit #SE94-01 and District Rule 210.1)	Reg. II, Rule 201.1

	Federally Enforceable Conditions	Reg/Rule
15.	Monitoring, Testing, Record Keeping Requirements (Applies to EU 007) (Portland Cement Kilns - Oxides of Nitrogen)	
	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.	
	Oxides of nitrogen stack testing for purposes of this requirement shall be conducted using EPA Test Method 7E.	
	Stack gas flow rate testing for purposes of this requirement shall be conducted using EPA Test Method 2.	
	The following formula shall be used to convert uncorrected observed NO_X concentration in ppm to tons per day at standard conditions of 68° F and a gas pressure of 29.92 inches of mercury:	
	$\frac{Tons \cdot NOx}{day} = \left(ppmv \cdot NOx\right) \times \left(\frac{46grams}{mole}\right) \times \left(1.56 \times 10^{-7} \left(\frac{dscf}{min}\right) \times \left(0.0120\right)$	
16.	Conditional Approval 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

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	Federally Enforceable Conditions	Reg/Rule
17.	Standards for Authority to Construct A. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without	Reg. II, Rule 210.1 Section
	 obtaining a Part 70 permit revision if: 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); The change is not subject to any requirements under Title IV of the Clean Air Act; The change is not a Title I modification; and The change does not violate an applicable requirement of the Clean Air Act or 	IV. D.3
	 a federally enforceable term or condition of this permit. B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change; 	
	C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;	
	D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;	
	E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and	
	F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.	
18.	Prevention of Significant Deterioration (PSD) 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

	Federally Enforceable Conditions	Reg/Rule
19.	Permit Fees 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	Reg. III, Rule 301
	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. 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. Payment of Supplemental Fee	
	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.	Rule 201.1 Section VIII.B.
20.	Greenhouse Gas Fee 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
21.	Visible Emissions Limits	Reg. IV, Rule 401
	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:	
	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	
	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.	

	Federally Enforceable Conditions	Reg/Rule
22.	 Particulate Matter Concentration - Desert Basin 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. 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
23.	Particulate Matter - Emission Rate 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
24.	Process Weight - Portland Cement Kilns 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
25.	Sulfur Compounds 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
26.	 Fuel Burning Equipment - Combustion Contaminants 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. 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
27.	Organic Solvents A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).	Reg. IV, Rule 410
28.	Disposal and Evaporation of Solvents A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.	Reg. IV, Rule 410.2
29.	Storage of Organic Liquids 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
30.	Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants A person shall not transfer gasoline into storage or delivery vessels unless provisions	Reg. IV, Rule 412
31.	Transfer of Gasoline into Vehicle Fuel Tanks 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
32.	 Monitoring, Testing, Record Keeping Requirements (Applies to EU 022) (Gasoline Storage - Phase I) A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 201.1 or 201.1a upon installation and as directed by the Air Pollution Control Officer; B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D-323-82 at storage temperature; and C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27 	Reg. IV, Rule 412

	Federally Enforceable Conditions	Reg/Rule
33.	Monitoring, Testing, Record Keeping Requirements (Applies to EU 022) (Gasoline Storage & Dispensing - Phase II) Verification that each CARB-certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in District Rule 412.1, Subsection V.C. shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing. Facility shall be pressure tested to determine proper installation and function before startup, and thereafter as directed by the Control Officer if not consistently operated leak-free or a major modification is implemented. Tests shall be conducted in accordance with test procedures found in CARB's "Test	Reg. IV, Rule 412.1
	Procedures for Determination of the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".	
34	Federal New Source Performance Standards (NSPS) Provisions of Title 40, Chapter 1, Part 60, 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. The following Federal New Source Performance Standards (NSPS) rules apply to this facility. 1) 40 CFR Part 60, Subpart A (General Provision);	Reg. IV, Rule 422
	 40 CFR Part 60, Subpart F (Standards of Performance for Portland Cement Plants); 40 CFR Part 60, Subpart Y (Standards of Performance for Coal Preparation and Processing Plants); 40 CFR Part 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants); and 	
	Pursuant to 40 CFR 70.6 (f), the Eastern Kern Air Pollution Control District expressly states that a Permit Shield is incorporated herein that determined 40 CFR part 60 subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines is not applicable to this Source. This permit shield does not apply if the source meets the following criteria in accordance with 40 CFR § 60.4200:	
	 a. Source owner or operator commences construction or reconstruction of compression ignition (CI) Internal Combustion Engine (s) (ICE) in accordance with § 60.4200 (a) (2) – (4). 	
	Nothing in this permit shall alter or effect the following:a. The provisions of section 303 of the Clean Air Act (emergency orders), including the authority of the Administrator under that section.b. The liability of an owner or operator for any violation of applicable requirements prior to or at the time of permit issuance.	

	Federally Enforceable Conditions	Reg/Rule
35.	National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS) 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. The following Federal National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS) rules apply to this facility. 1) 40 CFR Part 61, Subpart M (National Emission Standard for Asbestos); 2) 40 CFR Part 63, Subpart A (General Provision); 3) 40 CFR Part 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry); and 4) 40 CFR Part 63, Subpart ZZZZ (National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). Asbestos Facility shall comply with the applicable requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.	Reg. IV, Rule 423

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	Federally Enforceable Conditions	Reg/Rule	
36.	6. Compliance Certification The owner/operator shall comply with the following procedures for compliance certification:		
	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;		
	B. Compliance certification period shall begin April 1 of each year and end March 31 of the following year;		
	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;		
	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		
	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.		
	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.		
	U.S. EPA's Mailing Address: Director, Air Division 75 Hawthorne Street AIR-3 San Francisco, CA 94105		
37.	Protection of Stratospheric Ozone	40 CFR Part 82	
	Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156. 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.	1 art 02	
	Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.		

	Federally Enforceable Conditions	Reg/Rule
38.	Clean Air Act 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)

	District Only Rules	Reg/Rule
1.	Inspections 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.	Equipment Breakdown An occurrence which constitutes a breakdown condition, and which persists only until the end of the production run or 24-hours, whichever is sooner (except for continuous monitoring equipment, for which the period shall be ninety-six (96) hours), shall constitute a violation of any applicable emission limitation or restriction prescribed by these Rules and Regulations; however, no enforcement action may be taken provided the owner or operator demonstrates to the Control Officer that a breakdown condition exists and the proper requirements are met.	Reg. I, Rule 111
3.	Nuisance 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

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List of Insignificant Air Pollutant Emitting Equipment

Space Heating Equipment

Welding Equipment

Portable IC Engines - California Registered

Small IC Engines < 50 bhp

Boilers & Heaters < 5 MM Btu/hr

Air Conditioning Equipment

Atomic Absorption

Bunsen Burners

Inductively Coupled Plasma

Steam Cleaners, Natural Gas

Water Heaters, Natural Gas

Motor Vehicles as Defined in the CH&SC

Spectro Photometer

Aboveground Fuel Oil Storage Tanks

Below Ground Diesel Storage Tanks

Propane storage tanks

Lubrication storage

Small Degreasing Operations

Emission Unit 001 Permit Conditions

<u>Facility</u> <u>Number</u>	Emissions Unit	Description of Source
1221	001	Bulk & Sack Cement Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Twelve "A" Cement Storage Silos J6-401-SS through J6-412-SS ventilated to fabric collectors J6-428-DC and J6-429-DC with 25 hp Exhaust Fans J6-430-FA and J6-431-FA;
- B. "A" Cement Storage Silos Withdrawal System ventilated to fabric collectors J7-367-DC and J7-410-DC each with 20 hp exhaust fan, J7-368-FA and J7-411-FA respectively, with fabric collector exhaust vented to compressor, including:
 - 1. Two belt conveyors:
 - a. J7-300-BC with 20 hp motor serving cement silos J6-401-SS through J6-406-SS; and
 - b. J7-301-BC with 20 hp motor serving cement silos J6-407-SS through J6-412-SS.
 - 2. Air compressor (J-355-FK-C300) with 250 hp motor and BC-4 (cartridge type air filter). BC-4 accepts exhaust from fabric collectors J7-367-DC and J7-410-DC and exhausts to air compressor;
 - 3. Three F-K Pumps:
 - a. One 250 hp FK Pump (J7-310-FK) accepting cement from belt conveyor J7-300-BC;
 - b. One 250 hp FK Pump (J7-315-FK) accepting cement from belt conveyor J7-301-BC; and
 - c. One 150 hp (stand-by) FK Pump (J5-124).
 - 4. Manifold system accepting cement from FK pumps and sending cement to railcar loadout, packhouse, or bulk truck loadout.
- C. East/West Bulk Loadout System including:
 - 1. Two (East & West) Loadout Silos J3-100-SS and J3-101-SS for Bulk Cement Storage Loadout Operations to truck or rail ventilated to fabric collector J3-200-DC and 30 hp Exhaust Fan J3-205-FA;
 - 2. Two Airslides J3-170-AS and J3-171-AS from Bulk Cement Storage Silos J3-100-SS and J3-101-SS respectively to Loadout Spouts J3-191-LS and J3-193-LS (each modified to Model UN800-12DCL) respectively;
 - 3. Two Loadout Spouts J3-191-LS and J3-193-LS from Airslides J3-170-AS and J3-171-AS respectively ventilated to fabric collectors J3-201-DC and J3-202-DC respectively each with exhaust fan (J3-206-FA and J3-207-FA respectively); and
 - 4. Three blowers:
 - a. Two 40 hp Blowers J3-185-BL and J3-186-BL serving Airslides J3-170-AS and J3-171-AS and Bulk Storage Silos J3-100-SS and J3-101-SS; and
 - b. One 3 hp Blower J3-187-BL serving Airslides J3-170-AS and J3-171-AS.
- D. Cement Packing System No. 1 ventilated to fabric collector J4-140-DC and 40 hp Exhaust Fan J4-145-FA, including:
 - 1. Screens J4-100 and J4-101 from Bulk and Spillage Cement Transfer Lines to Hopper J4-105-HP;
 - 2. Hopper J4-105-HP from Screens J4-100 and J4-101 to Rotary Feeder J4-110-RF;

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- 3. Rotary Feeder J4-110-RF from Hopper J4-105-HP to Packer Bin J4-115-BI;
- 4. Packer Bin J4-115-BI from Rotary Feeder J4-110-RF to Packer J4-120;
- 5. Packer J4-120 from Packer Bin J4-115-BI to Belt Conveyor J4-125-BC;
- 6. Belt Conveyor J4-125-BC from Packer J4-120 to Belt Conveyor J4-126-BC;
- 7. Belt Conveyor J4-126-BC from Belt Conveyor J4-125-BC to bagged cement palletizing and storage;
- 8. Spill Hopper J4-106-HP from Packer J4-120 and Belt Conveyor J4-125-BC to Screw Conveyor J4-130-SC;
- 9. One 5 hp Screw Conveyor J4-130-SC from Spill Hopper J4-106-HP to Screw Conveyor J4-131-SC:
- One 5 hp Screw Conveyor J4-131-SC from Screw Conveyor J4-130-SC to Fluxo Pump J4-135;
 and
- 11. Fluxo Pump J4-135 from Screw Conveyor J4-131-SC to Screen J4-101.
- E. Cement Packing System No. 2 ventilated to fabric collector J4-540-DC and 50 hp Exhaust Fan J4-545-FA, including:
 - 1. Screen J4-500 and J4-101 from Bulk and Spillage Cement Transfer Lines to Hopper J4-500-HP;
 - 2. Hopper J4-505-HP from Screen J4-500 to Rotary Feeder J4-510-RF;
 - 3. Rotary Feeder J4-510-RF from Hopper J4-505-HP to Packer Bin J4-515-BI;
 - 4. Packer Bin J4-515-BI from Rotary Feeder J4-510-RF to Packer J4-520;
 - 5. Packer J4-520 from Packer Bin J4-515-BI to Belt Conveyor J4-525-BC;
 - 6. Belt Conveyor J4-525-BC from Packer J4-520 to Belt Conveyor J4-526-BC;
 - 7. Belt Conveyor J4-526-BC from Belt Conveyor J4-525-BC to Belt Conveyor J4-527-BC;
 - 8. Belt Conveyor J4-527-BC from Belt Conveyor J4-526-BC to bagged cement palletizing and storage;
 - 9. Spill Hopper J4-506-HP from Packer J4-520 and Belt Conveyor J4-525-BC to Screw Conveyor J4-530-SC;
 - 10. One 5 hp Screw Conveyor J4-530-SC from Spill Hopper J4-506-HP to Screw Conveyor J4-531-SC;
 - 11. One 5 hp Screw Conveyor J4-531-SC from Screw Conveyor J4-530-SC to Bucket Elevator J4-535-BE;
 - 12. One 10 hp Bucket Elevator J4-535-BE from Screw Conveyor J4-531-SC to Rotary Feeder J4-512-RF; and
 - 13. One 3 hp Rotary Feeder J4-512-RF from Bucket Elevator J4-535-BE to Hopper J4-505-HP.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Fabric collectors J7-367-DC and J7-410-DC shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 4. Filtering area of each fabric collector J7-367-DC and J7-410-DC shall not be less than 462 square feet. (Rule 210.1)
- 5. Each fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
- 6. Visible emissions from stacks of fabric collectors J7-367-DC and J7-410-DC shall not exceed 5% opacity or Ringelmann ¼. (Rule 210.1)

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- 7. Visible emissions from all other sources shall not exceed 10% opacity or Ringelmann ½. (Rule 422, 40 CFR Part 60 Subpart F).
- 8. Particulate matter emission concentration shall not exceed 0.01-gr/scf. (Rule 210.1)
- 9. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 10. Fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 11. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
- 12. Conveyors shall be covered when in operation. (Rule 210.1)
- 13. Old "A" silo bulk load out shall not be used for Bulk Product Shipping. (Rule 210.1)
- 14. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
- 15. Operation of bulk loadout spouts (J3-191-LS and J3-193-LS) shall not exceed 16 hours per day. (Rule 210.1)
- 16. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Sec 41700)
- 17. 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)

LOCALLY ENFORCEABLE CONDITIONS:

1. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rule 111. (Rule 111)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector J6-428-DC: 0.60 lb/hr (@ 6,855 acfm) 14.10 lb/day 2.57 ton/yr

Emission Unit 001 Permit Condition

Fabric Collector J6-429-DC: (@ 8,500 acfm)	0.73 17.49 3.19	lb/day
Fabric Collector J7-367-DC: (@ 2,750 acfm)	0.01 0.24 5.66 1.03	lb/hr lb/day
Fabric Collector J7-410-DC: (@ 2,750 acfm)	0.01 0.24 5.66 1.03	lb/hr lb/day
Fabric Collector J3-200-DC (@ 6,400 acfm)	0.55 8.78 1.60	lb/hr lb/day @16-hr/day ton/yr
Fabric Collector J3-201-DC (@1,600 acfm)	0.14 2.19 0.40	lb/hr lb/day@ 16-hr/day ton/yr
Fabric Collector J3-202-DC (@ 1,600 acfm)	0.14 2.19 0.40	lb/hr lb/day @16-hr/day ton/yr
Fabric Collector J4-140-DC (@ 9,000 acfm)	0.77 18.48 3.37	lb/hr lb/day ton/yr
Fabric Collector J4-540-DC (@ 10,000 acfm)	0.86 20.64 3.77	lb/hr lb/day ton/yr

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

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

Emission Unit 002 Permit Conditions

Facility	Emissions	
<u>Number</u>	<u>Unit</u>	Description of Source
1221	002	Truck Loadout Station

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Truck Loadout Station, including following equipment:

Cement Unloading and Surge equipment vented to Dust Collector J3-330-DC and 5 bhp Exhaust Fan J2-225-FA, including:

- 1. One 40 ton Surge Bin J3-300-SS receives cement from F-K Pump J3-300-SS or J5-221-FK and discharges to Loadout Spout J3-316-LS;
- 2. One pneumatic Positioner J3-315-LS positions Loading Spout J3-316-LS;
- 3. Loadout Spout J3-316-LS discharges cement from Surge Bin J3-300-SS to trucks;
- 4. Rotary Feeder J3-111-RF controls cement flow from Dust Collector J3-330-DC to Surge Bin J3-300-SS;
- 5. Rotary Feeder J3-110-RF controls cement flow from Surge Bin J3-300-SS to Loadout Spout;
- 6. One pneumatic Gate Valve J3-325-GA shuts off air flow from Positioner J3-315-LS to Dust Collector J3-330-DC; and
- 7. Truck Scale J3-320-SA weighs trucks for shipping.

OPERATIONAL CONDITIONS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

Emission Unit 003 Permit Conditions

Facility	Emissions	
Number	<u>Unit</u>	Description of Source
1221	003	Raw Material Storage & Handling Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

Emission Unit 003 Permit Conditions

- D. Raw Mill Feed Bin distribution equipment vented to Dust Collector D2-075-DC and 30 hp Exhaust Fan D2-076-FA, including:
 - 1. Diverter Gate D2-020-GA air op. from Belt Conveyor D1-001-BC to Belt Conveyor D2-025-BC or Preblend Bin S1-001-BI;
 - 2. One 25 hp 36 in. Belt Conveyor D2-025-BC from Diverter Gate D2-020-GA to Diverter Gate D2-027-GA;
 - 3. Diverter Gate D2-027-GA air op. from Belt Conveyor D2-025-BC to Belt Conveyor D2-030-BC or Reject Bin S1-301-BI;
 - 4. One 20 hp 36 in. Belt Conveyor D2-030-BC from Diverter Gate D2-027-GA to Silica Storage Bin S1-201-BI or Iron Ore Bin S1-401-BI;
 - 5. One 1 hp 9 in. Screw Conveyor D2-078-SC from Dust Collector D2-075-DC to Reject Bin S1-301-BI:
 - 6. One 600 ton Preblend Bin S1-001-BI from Diverter Gate D2-020-GA to Belt Feeder S1-003-BF (PTO 1221004A);
 - 7. One 800 ton Iron Ore Bin S1-401-BI from Belt Conveyor D2-030-BC to Belt Feeder S1-403-BF (PTO 1221004A);
 - 8. One 600 ton Reject Bin S1-301-BI from Diverter Gate D2-027 to Belt Feeder S1-303-BF (PTO 1221004A);
 - 9. One 600 ton Silica Bin S1-201-BI from Belt Conveyor D2-030-BC to Belt Feeder S1-203-BF (PTO 1221004A); and
 - 10. Five acres maximum outside emergency raw material storage areas located at Transfer Tower #1A, and east of Preblend Dome and in material storage areas.

OPERATIONAL CONDITIONS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Emission Unit 003 Permit Conditions

Particulate Matter (PM₁₀):

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

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Emission Unit 004 Permit Conditions

Facility Emissions		
Number	<u>Unit</u>	Description of Source
1221	004	Raw Mill System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Raw Mill System, including following equipment:

- A. Mill Feed Bin withdrawal equipment vented to Dust Collector S1-010-DC and 20 hp Exhaust Fan S1-011-FA, including:
 - 1. One 7.5 hp 48 in. Belt Feeder S1-003-BF withdraws material from Preblend Bin S1-001-BI and discharges to Weigh Feeder S1-004-WF;
 - 2. One 1 hp 48 in. Weigh Feeder S1-004-WF from Belt Feeder S1-003-BF to Belt Conveyor S2-101-BC:
 - 3. One 1 hp 36 in. Belt Feeder S1-403-BF withdraws material from Iron Ore Bin S1-401-BI and discharges to Weigh Feeder S1-404-WF;
 - 4. One 1 hp 48 in. Weigh Feeder S1-004-WF from Belt Feeder S1-003-BF to Belt Conveyor S2-101-BC;
 - 5. Two 5 hp Rotary Plow Feeder S1-305-RF withdraws material from Reject Bin S1-301-BI and discharges to Belt Feeder S1-303-BF;
 - 6. One 1 hp 36 in. Belt Feeder S1-303-BF from Rotary Plow Feeder S1-305-RF to Weigh Feeder S1-304-WF:
 - 7. One 1 hp 36 in. Weigh Feeder S1-404-WF from Belt Feeder S1-403-BF to Belt Conveyor S2-101-BC:
 - 8. Two 5 hp Rotary Plow Feeder S1-205-RF withdraws material from Silica Bin S1-201-BI and discharges to Belt Feeder S1-203-BF;
 - 9. One 1 hp 36 in. Belt Feeder S1-203-BF from Rotary Plow Feeder S1-205-RF to Weigh Feeder S1-204-WF; and
 - 10. One 1 hp 36 in. Weigh Feeder S1-204-WF from Belt Feeder S1-203-BF to Belt Conveyor S2-101-BC.
- B. Raw Mill Feed and Rejects Recirculation equipment vented to Dust Collector S2-115-DC and 20 hp Exhaust Fan S2-116-FA, including:
 - 1. One 25 hp 24 in. Belt Conveyor S2-101-BC collects material from Weigh Feeders S1-004-WF, S1-404-WF, S1-304-WF, and S1-204-WF and discharges into Bucket Elevator S2-105-BE;
 - 2. One 100 hp Bucket Elevator S2-105-BE from Belt Conveyor S2-101-BC to S2-108-GA Diverter Gate;
 - 3. One air oper. Diverter Gate from Bucket Elevator S2-105-BE to Mill Feed Bin S2-110-BI or to Open Pile Stacking Spout S2-114-LS;
 - 4. One 50 ton Mill Feed Bin S2-110-BI (with Manual Spile Bar Gate S2-111-GA) from Belt Conveyor S2-106-BC or S2-108-GA Diverter Gate to Reversible Belt Feeder S2-112-BF;
 - 5. One 3/4 hp Open Pile Stacking Spout S2-114-LS from Diverter Gate S2-108-GA, Belt Conveyor S2-106, or Reversible Belt Feeder S2-112-BF to emergency pile;
 - 6. One 5 hp 42 in. Reversible Belt Feeder S2-112-BF from Mill Feed Bin S2-110-BI to Triple Gate Feeder S3-105-TG;

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- 7. One 0.5 hp Reject Gate S3-117-GA from Roller Mill S3-110-RM to Rejects Drag Conveyor S3-111-DG:
- 8. One 3 hp Rejects Drag Conveyor S3-111-DG from Reject Gate S2-117-GA to Drag Conveyor S3-113-DG:
- 9. One 0.5 hp Reject Gate S3-118-GA from Roller Mill S3-110-RM to Rejects Drag Conveyor S3-112-DG;
- 10. One 3 hp Rejects Drag Conveyor S3-112-DG from Reject Gate S3-118-GA to Drag Conveyor S3-113-DG;
- 11. One 5 hp Drag Conveyor S2-113-DG from Rejects Drag Conveyor S3-111-DG and Rejects Drag Conveyor S3-112-DG to Drag Conveyor S3-114-DG; and
- 12. One 5 hp Drag Conveyor S3-114 -DG from Rejects Drag Conveyor S3-113-DG to Bucket Elevator S2-105-BE.
- 13. One 3 hp 36 in. Belt Conveyor S2-106-BC from Bucket Elevator S2-105-BE to Mill Feed Bin S2-110-BI or to Open Pile Stacking Spout S2-114-LS
- C. Raw Mill Grinding System using preheater gases and vented to ICA/Rees Size 10-7200 Senior 12, 20 compartment Dust Collector S3-160-DC and 1,500 hp Exhaust Fan S3-187-FA shared with EU 004, including:
 - 1. One 2,250 hp Roller Mill S3-110-RM accepts raw material for grinding from Triple Gate Feeder S3-117-TG and uses preheater gases to carry ground material to Classifier S3-120-SE;
 - 2. One 150 hp Classifier S3-120-SE accepts Roller Mill dust entrained gases, classifies material returning coarse particles to Roller Mill S3-110-RM, and carries fine particles to Cyclones S3-127 through S3-130;
 - 3. Cyclones accept dust laden gases from Classifier S3-120-SE, remove particulate as S3-127 through S3-130 product, and discharges product in Airslides S4-101-AS and S4-102-AS;
 - 4. One 2,500 hp Raw Mill System Fan S3-150-FA vents process gases from Roller Mill S3-110-RM and Cyclones S3-127 through S3-130 and exhaust to Kiln/Mill Dust Collector S3-160-DC;
 - 5. One 72 hp Isolation Damper S3-155-DA isolates mill from preheater exhaust gases when Roller Mill (S3-110-RM) is not operating; and
 - 6. Louvre Dampers S3-159-DA, S3-158-DA, S3-145-DA, and S3-157-DA control process gas flows during operation of Roller Mill S3-110-RM.
- D. Raw Mill Product Handling System from discharge of Cyclones S3-127 through S3-130 and vented to Dust Collector S4-115-DC and 15 hp Exhaust Fan S4-116-FA, including:
 - 1. Two 14 in. Airslides S4-101-AS and S4-102-AS collect raw meal from Cyclones S3-127 through S3-130-HP hoppers and discharges to Airslide S4-103-AS;
 - 2. One 16 in. Airslide S4-103-AS from Airslides S4-101-AS, S4-102-AS, and S4-105-AS to Airslide S4-104-AS;
 - 3. One 16 in. Airslide S4-104-AS from Airslide S4-103-AS to Airslide S4-176 and raw meal sampling system vented by Dust Collector S4-205-DC; and
 - 4. Two 20 hp Blowers S4-110-BL and S4-111-BL (standby to blower S4-110-BL) provides product conveying air to Airslides S4-101-AS, S4-102-AS, S4-103-AS, and S4-104-AS.
- E. Raw Mill Product Handling System from discharge of Kiln/Mill Dust Collector S3-160-DC Screw Conveyors vented to Dust Collector S4-145-DC and 10 hp Exhaust Fan S4-146-FA, including:
 - 1. One 20 hp 18 in. Screw Conveyor S4-130-SC collects dust from Screw Conveyors S3-183-SC, S3-184-SC, and S3-185-SC to Screw Conveyor S4-131-SC;
 - 2. One 20 hp 18 in. Screw Conveyor S4-131-SC from Screw Conveyor S4-130-SC to Bucket Elevator S4-132-BE or F-K Pump S4-140-FK;
 - 3. One 40 hp Bucket Elevator S4-132-BE from Screw Conveyor S4-131-SC to Airslide S4-105-AS;

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- 4. One 8 in. Airslide S4-105-AS from Bucket Elevator S4-132-BE to Airslide S4-103-AS;
- 5. One 10 hp Blower S4-170-BL provides product conveying air to Airslide S4-105-AS; and
- 6. One 75 hp 150MM Pump S4-140-FK from Screw Conveyor S4-131-SC to Blending Silo F1-100-SS and vented to 1000 CFM Dust Collector S4-150-DC and 5 hp Exhaust Fan S4-151-FA.
- F. Raw Meal Distribution to Blending Silo F1-100-SS vented to Dust Collector S4-205-DC and 30 hp Exhaust Fan S4-206-FA both shared with EU 005, including:
 - 1. Raw Meal Sampling S8-100-SX1, S8-100-SX2, S8-110-MX, and S8-125-RS removes sample of raw meal from product stream discharging from Airslide S4-104-AS to Airslide S4-176-AS;
 - 2. One 16 in. Airslide S4-176-AS from Airslide S4-104-AS to Airslide S4-177-AS;
 - 3. One 16 in. Airslide S4-177-AS from Airslide S4-176-AS to Bucket Elevator S4-185-BE;
 - 4. Two 5 hp Blowers S4-182-BL and S4-183-BL (standby to Blower S4-182-BL) provide product conveying air to Airslide S4-176-AS and Airslide S4-177-AS;
 - 5. One 150 hp Bucket Elevator S4-185-BE from Airslide S4-177-AS to Airslide S4-186-AS;
 - 6. One 16 in. Airslide S4-186-AS from Bucket Elevator S4-185-BE to Distributor S4-188-DI;
 - 7. Distributor S4-188-DI from Airslide S4-186-AS to Airslides S4-190-AS, S4-191-AS, S4-192-AS, S4-193-AS, S4-194-AS, and S4-195-AS;
 - 8. Airslides S4-190-AS, S4-191-AS, S4-192-AS, S4-193-AS, S4-194-AS, and S4-195-AS from Distributor S4-188-DI to Blending Silo F1-100-SS (EU 005);
 - 9. Two 7.5 hp Blowers S4-196-BL and S4-197-BL (standby to Blower S4-196-BL) provide product conveying air to Distributor S4-188-DI, Airslides S4-190-AS, S4-191-AS, S4-192-AS, S4-193-AS, S4-194-AS, and S4-195-AS; and
 - 10. One 5 hp Blower S4-187-BL provides product conveying air to Airslide S4-186-AS.

OPERATIONAL CONDITIONS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Emission Unit 004 Permit Conditions

Particulate Matter (PM₁₀):

Fabric Collector S1-010-DC: 0.10 lb/hr

Fabric Collector S2-115-DC: 0.11 lb/hr

Fabric Collector S4-115-DC: 0.16 lb/hr

Fabric Collector S4-145-DC: 0.13 lb/hr

Fabric Collector S4-150-DC: 0.05 lb/hr

Fabric Collector S4-205-DC: 0.52 lb/hr

Total: 25.68 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)

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Emission Unit 005 Permit Conditions

<u>Facility</u>	Emissions	
Number	<u>Unit</u>	Description of Source
1221	005	Homogenizing & Kiln Feed System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Homogenizing Silo System vented to Dust Collector S4-205-DC shared with EU 004 and Exhaust Fan S4-206-FA shared with EU 004, including:
 - 1. One 10,000 ton Blending Silo F1-100-SS receives material from distribution Airslides S4-190-AS, S4-191-AS, S4-192-AS, S4-193-AS, S4-194-AS, and S4-195-AS (EU 004);
 - 2. One 40 hp Blower F1-135-BL aeration air to Blending Silo F1-100-SS outer ring;
 - 3. One 100 hp Blower F1-136-BL standby blower;
 - 4. One 100 hp Blower F1-137-BL aeration air to Blending Silo F1-100-SS active chamber; and
 - 5. One 100 hp Blower F1-138-BL aeration air to Blending Silo F1-100-SS inactive chamber.
- B. Blending Silo Withdrawal System vented to Dust Collector F1-185-DC and 15 hp Exhaust Fan F1-186-FA, including:
 - 1. One 14 in. Airslide F1-113-AS from Blending Silo F1-100-SS discharge to Airslide F1-141-AS or Kiln Feed Bin F1-150-BI;
 - 2. One 14 in. Airslide F1-118-AS from Blending Silo F1-100-SS discharge to Airslide F1-141-AS or Kiln Feed Bin F1-150-BI;
 - 3. One 14 in. Airslide F1-128-AS from Blending Silo F1-100-SS discharge to Airslide F1-130-AS;
 - 4. One 40 ton Kiln Feed Bin F1-150-BI from Airslide F1-113-AS and Airslide F1-118-AS to Airslide F1-158-AS or Airslide F1-163-AS;
 - 5. One 5 hp Blower F1-114-BL conveying air for Airslide F1-113-AS and Airslide F1-118-AS;
 - 6. One 5 hp Blower F1-121-BL standby blower for Blower F1-114-BL;
 - 7. One 14 in. Airslide F1-176-AS from Kiln Feed Bin F1-150-BI to truck loadout;
 - 8. One 14 in. Airslide F1-158-AS from Kiln Feed Bin F1-150-BI to Flowmeter F1-159-FL;
 - 9. One 14 in. Airslide F1-163-AS from Kiln Feed Bin F1-150-BI to Flowmeter F1-164-FL;
 - 10. One 25 hp Blower F1-165-BL provides aeration and conveying air to Kiln Feed Bin F1-150-BI, Airslide F1-158-AS, Airslide F1-163-AS, and Airslide F1-176-AS;
 - 11. One 25 hp Blower F1-166-BL standby blower for Blower F1-165-BL;
 - 12. Flowmeter F1-159-FL from Airslide F1-158-AS to Distributor F1-170-DI;
 - 13. Flowmeter F1-164-FL from Airslide F1-156-AS to Distributor F1-170-DI;
 - 14. Distributor F1-170-DI from Flowmeter F1-159-FL and Flowmeter F1-164-FL to Airslide F1-172-AS or Airslide F1-174-AS;
 - 15. One 25 in. Airslide F1-172-AS from Distributor F1-170-DI to Bucket Elevator F1-205-BE;
 - 16. One 25 in. Airslide F1-174-AS from Distributor F1-170-DI to Bucket Elevator F1-200-BE; and
 - 17. One 5 hp Blower F1-175-BL furnishes conveying air to Airslide F1-172-AS, Airslide F1-174-AS, and Distributor F1-170-DI.

Emission Unit 005 Permit Conditions

- C. Kiln Feed Elevating System vented to Dust Collector F1-235-DC and 20 hp Exhaust Fan F1-236-FA, including:
 - 1. One 250 hp Bucket Elevator F1-200-BE from Airslide F1-174-AS to Airslide F1-225-AS or bypass chute to 005Airslide S4-106;
 - 2. One 250 hp Bucket Elevator F1-205-BE from Airslide F1-172-AS to Airslide F1-225-AS or bypass chute to Airslide S4-186-AS;
 - 3. One 14 in. Airslide F1-225-AS from Bucket Elevator F1-200-BE or Bucket Elevator F1-205-BE to Airslide F1-230-AS;
 - 4. One 14 in. Airslide F1-230-AS from Airslide F1-225-AS to Rotary Feeder G1-153-RF or Rotary Feeder G1-155-RF (EU 007);
 - 5. One 3 hp Blower F1-217-BL furnishes conveying air to Airslide F1-225-AS and Airslide F1-230-AS; and
 - 6. One 3 hp Blower F1-218-BL standby blower for Blower F1-217-BL.

OPERATIONAL CONDITIONS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector S4-205-DC: Shared with EU 004

Fabric Collector F1-185-DC: 0.21 lb/hr

Fabric Collector F1-235-DC: 0.31 lb/hr

Total: 12.47 lb/day

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

Emission Unit 005 Permit Conditions

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

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Emission Unit 006 Permit Conditions

<u>Facility</u> <u>Number</u>	Emissions Unit	Description of Source
1221	006	Coal Drying & Pulverizing System

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Coal Unloading and Storage equipment vented to Dust Collector G7-125-DC and 15 hp Exhaust Fan G7-126-FA, including:
 - 1. 20-hp Car Shaker G7-110-CS shakes rail car to assist in withdrawal of coal during unloading;
 - 2. Two 50-ton Track Hoppers G7-101-HP and G7-102-HP discharge point for bottom dump coal rail cars;
 - 3. Two 0.75-hp 24 in. Screw Conveyors G7-103-SC and G7-104-SC from Track Hoppers G7-101-HP and G7-102-HP to Screw Conveyor G7-105-SC;
 - 4. 40-hp 24 in. Screw Conveyor G7-105 from Screw Conveyors G7-103-SC and G7-104-SC to Bucket Elevator G7-106-BE;
 - 5. 75-hp Bucket Elevator G7-106-BE from Screw Conveyor G7-105-SC to Diverter Gate G7-107-GA;
 - 6. Pneumatic Diverter Gate G7-107-GA diverts from Bucket Elevator G7-106-BE to outside emergency coal pile or Conveyor Belt G7-108-BC;
 - 7. 15-hp, 30-in. Belt Conveyor G7-108-BC from Diverter Gate G7-107-GA to Diverter Gate G7-115-GA;
 - 8. 1-hp Open Stacking Spout G7-109-LS stacks coal on open storage pile or into trucks;
 - 9. Pneumatic Diverter Gate G7-115-GA diverts from Conveyor Belt G7-108-BC to Reversible Conveyor Belt G7-116-GA or Coal Bin G7-210-BI;
 - 10. 7.5-hp 30 in. Reversible/Belt Conveyor G7-116-BC from Diverter Gate G7-115-GA to Coal Bin G7-200-BI or Coke Bin G7-220-BI;
 - 11. 1,000-ton Raw Coal Bin G7-200-BI accepts coal from Reversible/Belt Conveyor G7-116-BC and withdraws to Weigh Feeder G7-206-WF;
 - 12. 2-hp Vibrating Bin Bottom G7-201-VB assists withdrawal from Coal Bin G7-200-BI to Weigh Feeder G7-206-WF;
 - 13. 1,000-ton Raw Coal Bin G7-210-BI accepts coal from Diverter Gate G7-115-GA and withdraws to Weigh Feeder G7-216-WF;
 - 14. 2-hp Vibrating Bin Bottom G7-211-VB assists withdrawal from Coal Bin G7-210-BI to Weigh Feeder G7-216-WF;
 - 15. 600-ton Raw Coke Bin G7-220-BI accepts coke from Reversible/Belt Conveyor G7-116-BC and withdraws to Weigh Feeder G7-226-WF; and
 - 16. Manual Spile Bar Gate G7-225-GA restricts flow from Coke Bin G7-220-BI as required.
- B. Raw Coal Withdrawal equipment vented to Dust Collectors G7-238-DC, G7-232-DC, and G7-230-DC and respective 7.5 hp Exhaust Fans G7-239-FA, G7-233-FA, and G7-231-FA, including:
 - 1. 3-hp, 36-in. Weigh Feeder G7-206-WF withdraws from Coal Bin G7-200-BI and discharges to Belt Conveyor G7-235-BC;

Emission Unit 006 Permit Conditions

- 2. 3-hp, 36-in. Weigh Feeder G7-216-WF withdraws from Coal Bin G7-210-BI and discharges to Belt Conveyor G7-235-BC; and
- 3. 3-hp, 36-in. Weigh Feeder G7-226-WF withdraws from Coke Bin G7-220-BI and discharges to Belt Conveyor G7-235-BC.
- C. Coal Mill Feed equipment vented to Dust Collector G7-255-DC and 7.5 hp Exhaust Fan G7-256-FA, including:
 - 1. 15-hp, 24-in. Belt Conveyor G7-235-BC collects coal/coke from Weigh Feeders G7-206-WF, G7-216-WF, and G7-226-WF and discharges to Coal Mill Feed Bin G7-245-BI;
 - 2. 20-ton Coal Mill Feed Bin G7-245 receives coal/coke from Belt Conveyor G7-237 and discharges to Drag Chain Conveyor G7-301-DG;
 - 3. 5-hp Drag Chain Conveyor G7-301-DG from Coal Mill Feed Bin G7-245-BI to Screw Feeder G7-305-SC or Manual Diverter Gate G7-303-GA;
 - 4. Manual Diverter Gate G7-303-GA from Drag Chain Conveyor G7-301-DG to outside emergency pile;
 - 5. 5.5-kw Screw Conveyor G7-305-SC from Drag Chain Conveyor G7-301-DG to Coal Mill G7-306-CM; and
 - 6. Manual Spile Bar Gate G7-250-GA restricts flow from Coal Mill Feed Bin G7-245-BI as required.
- D. Coal Mill Grinding System using preheater gases vented system to Dust Collectors G7-315-DC, G7-325-DC, G7-335-DC and G7-345-DC and 400-hp System Fan G7-355-FA, including:
 - 1. 350-hp Coal Mill G7-306-CM receives coal/coke from Screw Conveyor G7-305-SC and uses preheater gases to carry ground coal/coke to Classifier G7-307-SE;
 - 2. 60-hp Classifier G7-307-SE receives coal mill dust entrained gases, classifies returning coarse material to Coal Mill G7-306-CM, and carries fine particles to Dust Collectors G7-315-DC, G7-325-DC, G7-335-DC and G7-345-DC;
 - 3. 400-hp Coal Mill System Fan G7-355-FA vents process gases from Coal Mill G7-306-CM and Dust Collectors G7-315-DC through G7-345-DC and exhausts to Coal Mill Stack G7-358-SK;
 - 4. Coal Mill Stack G7-358-SK discharge is routed to the inlet of Kiln Baghouse S3-160-DC;
 - 5. Pneumatic Isolation Dampers G6-156-DA and G6-314-DA isolates Coal Mill G7-306-CM from process gas flow while not operating;
 - 6. Pneumatic Isolation Dampers G6-156-DA and G6-314-DA isolates Coal Mill G7-306-CM from cleaning gas flow while not operating;
 - 7. 1-hp and two 2-hp Louver Dampers G6-152-DA, G7-351-DA, and G7-356-DA control of process gas flow during Coal Mill G7-306-CM operation;
 - 8. Pneumatic Isolation Dampers G6-315-DA through G6-346-DA and G7-317-DA through G7-348-DA isolates system Dust Collectors G7-315-DC through G7-345-DC from process gas flow while not in operation;
 - 9. Pneumatic Slide Gate G7-304-GA shuts off coal/coke flow to Coal Mill G7-306-CM reject chute as required; and
 - 10. G7-310-BL Blower provides air for positive pressure seal to roller bearings.
- E. Coal Mill Product Handling equipment from discharge of Coal Mill System Dust Collectors vented to Dust Collector G7-420-DC and 12-hp Exhaust Fan G7-421-FA, including:
 - 1. Four 0.5-hp Rotary Air Locks G7-319-RV through G7-349-RV assists in product withdrawal from system Dust Collectors G7-315-DC through G7-345-DC to Screw Conveyors G7-360-SC and G7-361-SC;
 - 2. Two 3-hp, 12 in. Screw Conveyors G7-360-SC and G7-361-SC from Rotary Air Locks G7-360-RV and G7-361-RV to Diverter Valve G7-405-VA;

Emission Unit 006 Permit Conditions

- 3. 30-hp F-K Pump G7-400-FK from Screw Conveyor G7-360-SC and G7-361-SC to Diverter Valve G7-405-VA;
- 4. 125-hp Compressor G7-404-AC provides compressed air to F-K Pump G7-400-FK;
- 5. 125-hp standby Compressor G7-414-AC provides compressed air for F-K Pump G7-400-FK;
- F. Kiln and Precalciner Fuel Feed System vented to High Pressure Filter Dust Collectors G7-505-DC and G7-515-DC, including:
 - 1. 2-hp Diverter Valve G7-405-VA diverts from F-K Pump G7-400-FK to kiln ground Coal Bin G7-500-BI or precalciner ground Coal Bin G7-510-BI;
 - 2. Manual Shut-Off Gates G7-318-GA through G7-348-GA manual shut-off of Dust Collectors from material outlet flow as required;
 - 3. 100-ton Kiln Coal Bin G7-500-BI receives coal/coke from Diverter Valve G7-405-GA and discharges to Agitator G7-508-AG;
 - 4. 5-hp Agitator G7-508-AG receives coal/coke from Kiln Coal Bin G7-500-BI and discharges to Pfister Feeder G7-503-CF;
 - 7. Pneumatic Shut Off Gate G7-501-GA shuts off material flow from Kiln Ground Coal Bin G7-500-BI;
 - 8. Pneumatic Control Gate G7-502-GA shuts off material flow from Kiln Ground Coal Bin G7-500-BI;3-hp Pfister Feeder G7-503-CF receives coal/coke from Agitator G7-508-AG and conveys to Kiln Burner;
 - 16. Emergency Dump Chute discharges coal/coke from Agitator G7-518-AG to ground.

OPERATIONAL CONDITIONS:

- 1. Screw feeders must be enclosed. (Rule 210.1 BACT requirement)
- 2. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 3. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 4. Visible emissions from any single emission point shall be less than 20% opacity. (Rule 401)
- 5. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
- 6. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 7. Particulate matter from Coal Mill Dust Collectors G7-315-DC, G7-325-DC, G7-335-DC, and G7-345-DC shall be no more than 0.031 gr/scf. (Rule 422, Subpart Y)
- 8. All screw conveyors and airslides shall be completely enclosed. (Rule 210.1)
- 9. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 10. Temperature shall be continuously recorded at dust collector outlet manifold. (Rule 422, Subpart F)

COMPLIANCE TESTING REQUIREMENTS:

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

Emission Unit 006 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

articulate Matter (1 M 10).		
<u>Dust Collectors</u>		
G7-125-DC	0.08	lb/hr
	1.95	lb/day
	0.36	ton/yr
	0.50	tom yr
G7-230-DC	0.03	lb/hr
	0.82	lb/day
	0.36	ton/yr
G7-232-DC	0.03	lb/hr
	0.82	lb/day
	0.36	ton/yr
		J
G7-238-DC	0.04	lb/hr
	1.03	lb/day
	0.19	ton/yr
		•
Total from: G7-315-	1.34	lb/hr
DC,		
G7-325-DC, G7-335-	32.09	lb/day
DC, and		•
G7-345-DC	5.86	ton/yr
		J
G7-420-DC	0.01	lb/hr
	0.25	lb/day
	0.05	ton/yr
		J
G7-505-DC	0.05	lb/hr
	1.23	lb/day
	0.22	ton/yr
	·	- 0 12, J 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)

Facility	Emissions	
<u>Number</u>	<u>Unit</u>	Description of Source
1221	007	Preheater/Precalciner Portland Cement Kiln

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Pyroprocessing equipment vented to ICA/Rees size 20-7200 senior 12, 20 compartment dust collector S3-160-DC and 1500 hp exhaust fan S3-187-FA shared with PTO 1221004A, including:
 - 1. 2-hp louver damper S3-186-DA controlling process gas flow while gas circuit is operational;
 - 2. Ten 0.5-hp tipping valves S3-162-RF through S3-171-RF compartments 1 through 10 tipping valves for material flow to screw conveyor S3-183-SC;
 - 3. Ten 0.5-hp tipping valves S3-172-SC through S3-181-SC compartments 11 through 20 tipping valves for dust flow to screw conveyor S3-185-SC;
 - 4. 10-hp 14 in. screw conveyor S3-183-SC serving compartments 1 through 10 to discharging to screw conveyor S4-130-SC;
 - 5. 10-hp 14 in. screw conveyor S3-184-SC serving plenum chamber discharging to screw conveyor S4-130-SC;
 - 6. 10-hp 14 in. screw conveyor S3-185-SC serving compartments 11 through 20 discharging to screw conveyor S4-130-SC;
 - 7. 125-hp reverse air fan S3-151-FA providing reverse air flow during baghouse operation; and
 - 8. Pneumatic dampers S3-188-DA and S3-189-DA controlling air flow during dust collector S3-160-DC operation.
 - 9. One PAC Bin S4-250-BI vented to dust collector S4-251-DC and 3 hp exhaust fan S4-252-FA, including hoppers, feeders, blowers, and eductors.
- B. Preheater/Precalciner equipment, including:
 - 1. Two 5-hp rotary feeders G1-153-RF and G1-155-RF receiving feed from airslide F1-230-AS and discharging to preheater G2-100-PR;
 - 2. One 5-hp rotary feeder G1-155-RF receiving feed from airslide F1-233-AS;
 - 3. Two 5-hp shut-off gates G1-154-GA and G1-156-GA isolation gates for rotary feeders G1-153-RF or G1-155-RF;
 - 4. 6-stage preheater G2-100-PR receives kiln feed from rotary feeders G1-153-RF or G1-155-RF, discharging from stage 5 to precalciner G2-125-PC;
 - 5. Multiple fuel (gas, coal, coke and other permitted fuels) precalciner G2-125-PC receiving preheated kiln feed from stage 5 under flow, (precalcines kiln feed and feeds kiln G2-150-RK via preheater G2-100-PR stage 6);
 - 6. 5-hp cooling fan G2-130-FA providing ambient air for cooling precalciner burner G2-112-BU;
 - 7. Three 1-hp louver dampers G6-105-DA, G6-110-DA, and G6-155-DA controlling process gas flow during kiln G2-150-RK operation;
 - 8. 2-hp louver damper G6-154-DA bleed-in ambient air for kiln ID Fan G6-150-FA (protection of overheating);
 - 9. Pneumatic isolation damper G6-153-DA (isolates coal circuit from preheater exhaust gases);

- 10. Tertiary air duct G6-100-DU from cooler G2-200-CC to preheater G2-100-PR and associated valves and piping (NO_X control system);
- 11. Bypass Duct G6-107-DU from Tertiary air duct G6-100-DU to preheater G2-100-PR
- 12. 2500-hp kiln ID Fan G6-150-FA(fan wheel 158" dia. X 183/8" at tip and 343/8" at inlet) providing gas flow through pyroprocessing circuit; and
- 12. 140 ton hydrated lime silo G6-140-BI with 325 cfm dust collector G6-142-DC and feeder.

C. Kiln equipment, including:

- 1. 350-hp rotary kiln G2-150-RK, equipped with Pillard NovaFlam Low NOx burner, receiving hot meal from preheater G2-100-PR stage 6 and discharging to clinker cooler G2-100-CC;
- 2. Two 1-hp variable orifice G2-154 providing gas flow restriction to kiln G2-150-RK exhausting to preheater G2-100-PR as required;
- 3. 3-hp 9 in. screw conveyor G2-165-SC serving kiln G2-150 feed end discharging to tote box through Tipping valve G2-166-TV;
- 4. Tipping valve G2-166-TV controlling material flow from screw conveyor G2-165-SC discharging to tote box;
- 5. Tipping valve G2-184-TV serving kiln G2-150-RK discharging to cooler drag chain G2-206-DG;
- 6. 15-hp cooling fan G2-177-FA providing cooling air to kiln G2-150-RK feed end seal;
- 7. 20-hp blower G2-180-BL providing cooling air to kiln G2-150-RK nose ring;
- 8. Blower G2-162 pressurizing fan for kiln G2-150 discharge end seal;
- 9. Damper G2-183-DA providing flow control to discharge end seal;
- 10. 40-hp fan G2-175-FA providing primary air to kiln G2-150-RK burner G2-151-BU;
- 12. 100-hp fan G2-170-FA providing swirl air to the kiln G2-150-RK burner G2-151-BU;
- 13. Ducting from Coal Mill Stack G7-358-SK to Kiln Baghouse S3-160-DC routing from dust collectors G7-315-DC, G7-325-DC, G7-335-DC, and G7-345-DC ('006E).

D. SNCR System, including: (NEW)

- 1. Ammonia injection system, reagent for selective non-catalytic reduction system (SNCR);
- 2. 20,000-gal, double-wall, vertical aqueous ammonia storage tank (pressure vessel equipped with pressure relief valve) G2-401-TK;
- 3. Two centrifugal ammonia pumps G2-425-PU and G2-432-PU (one serving as backup) and each driven by a 3-hp electric motor;
- 4. Ammonia Distribution system equipped with pressure gauges, valves, recirculation lines, and supplied by plant compressed air for atomization;
- 5. Injection system with two injection points at preheater tower and with each injection point IM450 and IM440 made up of four injection nozzles;
- 6. Two New York Blower cooling fans suppling barrier air to both injection locations;
- 7. Flushing water skid equipped with 264-gal water tank G2-431-TK and water softener system G2-430-WS; and
- 8. Flushing water centrifugal pump G2-432-PU driven by a 3-hp electric motor.

DESIGN CONDITIONS:

- 1. Kiln exhaust stack shall be equipped with continuous ammonia concentration monitor/recorder, secured against tampering after calibration. (Rule 210.1 and 419)
- 2. Ammonia injection system shall be equipped with ammonia metering system determining rate of ammonia injected. (Rule 210.1)
- 3. Kiln dust collector shall be equipped with an operational exhaust gas temperature indicator. (Rule 210.1)
- 4. Each kiln dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 210.1)

5. Each fabric collector shall be equipped with pulse-jet cleaning mechanism or equivalent. (Rule 210.1)

OPERATIONAL CONDITIONS:

- 1. Kiln shall be fired only with coal, petroleum coke, natural gas, biomass, engineered municipal waste or tire derived fuel (TDF). No other combustible products shall be added to kiln system without prior written permission of Control Officer. (Rule 210.1)
- 2. District approval is required prior to use of TDF, biomass (cogeneration fines), and biomass (agriculture material).
- 3. Use of coal shall not exceed 90,000 tons per year in the kiln system. (Rule 210.1)
- 4. Use of petroleum coke shall not exceed 50,000 tons per year in the kiln system. (Rule 210.1)
- 5. Biomass utilized for pyroprocessing system shall not exceed 40%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
- 6. Use of biomass shall not exceed 70,500 tons per year. (Rule 210.1)
- 7. Refuse Derived Fuel (RDF) utilized for pyroprocessing system shall not exceed 50%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
- 8. RDF shall not exceed 50% of the total heat content of the fuel based on a quarterly basis. (Rule 210.1)
- 9. Use of RDF shall not exceed 47,000 tons per year. (Rule 210.1)
- 10. TDF use shall not exceed 70% of all fuel on a weight basis within any 24 hour period. (Rule 210.1)
- 11. TDF utilized for pyroprocessing system shall not exceed 50%, calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)
- 12. Use of TDF shall not exceed 70,000 tons per year. (Rule 210.1)
- 13. Process shall not be operated unless emission control equipment is in operation. (Rule 210.1)
- 14. There shall be no fugitive emissions from any process or dust control equipment. (Rule 210.1)
- 15. Material removed from dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 16. All fines collected in dust collectors shall be returned to process or introduced into final product. (Rule 210.1)
- 17. Conveyors handling kiln dust shall be totally enclosed. (Rule 210.1 BACT)
- 18. Ductwork connecting material drop points shall be maintained in air-tight condition to prevent reentrainment into the atmosphere. (Rule 210.1)
- 19. Particulate emissions from sources other than kiln stack shall be no more than 0.1-gr/scf. (Rule 404.1)
- 20. Visible emissions from sources other than kiln stack shall not exceed 10% opacity. (Rule 422, Subpart F {NSPS, 40 CFR §60.62(c)})
- 21. No air contaminant shall be released into atmosphere which causes public nuisance or public health hazard. (Rule 419 and CH&SC, Sec 41700)
- 22. Permittee shall maintain hourly PM Continuous Parametric Monitoring System (CPMS) readings and corresponding clinker production, and such records shall be readily available upon District request. (Rule 210.1)

Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rule 422, Subpart F)

- 23. The owner/operator shall maintain, calibrate, and operate a stack gas NOx continuous emission monitoring system for the kiln stack emissions at all times when the kiln is in operation except during CEMS breakdowns, repairs, calibration checks, zero span adjustments, and any stack repairs that require the removal and recalibration of the CEMS. The NOx CEMS must follow the monitoring methods and procedures in 40 CFR Part 60 to demonstrate continuous compliance with the 30-day rolling average NOx emissions limit. The NOx CEMS must record the NOx emission rate in units of ppm, lb/hr, and lb/ton clinker. During any time when the NOx CEMS is inoperable or otherwise not measuring emissions of NOx from the kiln, the Facility shall apply the missing data substitution procedures in 40 CFR Part 75, Subpart D, or as otherwise directed by the District. (Rule 210.1)
- 24. The operator shall maintain, calibrate, and operate a stack gas SO2 continuous emission monitoring system for the kiln stack emissions at all times when the kiln is in operation except during CEMS breakdowns, repairs, calibration checks, zero span adjustments, and any stack repairs that require the removal and recalibration of the CEMS. The SO2 CEMS must follow the monitoring methods and procedures in 40 CFR Part 60 to demonstrate continuous compliance with the 30-day rolling average SO2 emissions limit. The SO2 CEMS must record the SO2 emission rate in units of ppm, lb/hr, and lb/ton clinker. During any time when the SO2 CEMS is inoperable or otherwise not measuring emissions of SO2 from the kiln, the Facility shall apply the missing data substitution procedures in 40 CFR Part 75, Subpart D, or as otherwise directed by the District. (Rule 210.1)
- 25. Ammonia emissions from the kiln stack shall not exceed limits established herein, except during periods of startup and shutdown as defined in 40 CFR 63.1341 when SNCR ammonia is not actively being injected. (Rule 210.1 & 425.3)
- 26. Facility shall maintain files including:
 - a. Data collected from in-stack monitoring instruments and process monitoring;
 - b. Fuel input rate;
 - c. Sulfur content of fuels input into kiln;
 - d. Clinker production rates; and
 - e. Results of all source tests and calibrations checks.

LOCALLY ENFORCEABLE CONDITIONS:

1. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rule 111. (Rule 111)

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. Kiln fabric collector stack shall be equipped with continuously recording oxides of nitrogen, oxides of sulfur, carbon monoxide, oxygen, particulate matter, total hydrocarbons as propane, mercury, and temperature monitors. (Rules 210.1, 422 Subpart F, and 423 Subpart LLL)
- bb. Reports of excess emissions shall be submitted semiannually for all PM exceedances. Report shall comply with requirements of Code of Federal Regulations Section 40 Part 60.7c. (Rule 422, Subpart F)

EMISSION LIMITS:

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

Particulate Matter (PM ₁₀):			
Kiln Baghouse S3-160-DC:	0.01	gr/acfm	
	0.3	lb/ton of feed	(Rule 422, 40 CFR Part 60 Subpart F)
		to kiln (dry)	
	0.07	lb/ton of	(Rule 423, 40 CFR Part 63 Subpart
		clinker	LLL)
	17.90		
	429.60	•	
	78.40	ton/yr	
PAC Bin Vent Filter S4-51-DC:			
	0.0013	gr/acfm	
	0.02	lb/hr	
	0.40	lb/day	
	0.07	ton/yr	
Hydrated Lime Dust Collector	0.01	gr/acfm	
G6-142-DC:	0.01	lb/hr	
G0 142 DC.	0.67	lb/day	
	0.12	ton/yr	
	0.4	11 (
Sulfur Compounds (SOx as SO2):	0.4	lb/ton	of clinker produced (30 operating day rolling avg.)
	295.25	lb/hr	(24 hr average)
	7,086.00		(2 i iii average)
	1,239.20	•	
	, : - 0	· J	
Sulfur Compounds (SOx as SO₄):	29.54	lb/hr	(24 hr average)
	708.96	lb/day	
	129.39	ton/yr	

Emission Unit 007 Permit Conditions

Oxides of Nitrogen (NOx as NO ₂):	1.5	lb/ton	of clinker produced
	281.33 6,752.00 1,232.24	lb/hr lb/day ton/yr	(30 operating day rolling avg.) (Annual Stack testing) (30-day operating rolling avg.)
Volatile Organic Compounds (VOC):	45.08 1,082.00 197.47	lb/hr lb/day ton/yr	(24 hr average)
Carbon Monoxide:	3,033.00 2,135.00 1,282.00 900.00 30,768.00 21,600.00 3,942.00	•	(3 hr average) (Rule 210.4) (8 hr average) (Rule 210.4) (24 hr average) (365 day rolling avg.) (Rule 210.4) (maximum day) (annual avg. day) (Rule 210.4)
Ammonia Slip (From SNCR ammonia injection)	10.0 50.0 8.18 196.43 71,696.87	ppmv ppmv lb/hr lb/day lb/yr	dry @ 7% O ₂ (24-hr rolling avg.) wet (unadjusted) at any given hour
NESHAP Limit (Rule 423, 40 CFR Part 63,	, Subpart LLL)	<u>.</u>	
Dioxin/Furans (D/F): From Kiln Fabric Collector S3-160	0.20 0.40	ng /dscm	a TEQ @ 7% O_2 a TEQ @ 7% O_2 (if avg. inlet temp. M control device \leq 400 °F)
Mercury: From Kiln Fabric Collector S3-160-DC	55	lb/MMtc average)	ons clinker (30 operating day rolling
Total Hydrocarbons (THC): From Kiln Fabric Collector S3-160-DC	24		7% O₂, measured as propane(30 g day rolling average)
Hydrogen Chloride (HCl): From Kiln Fabric Collector S3-160-DC	3		2 7% O ₂ (30 operating day rolling if demonstrated with a CEMS)

(Compliance with NESHAP limits based on provisions of 40 CFR Part 63, Subpart LLL)

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

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

Facility	Emissions
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Number <u>Unit</u> <u>Description of Source</u>

1221 008 Clinker Cooler

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Clinker Cooler, including following equipment:

- A. Clinker Cooler G2-200-CC, vented to Dust Collector G6-210-DC equipped with a 1,250 hp exhaust fan G6-220-FA, including the following:
 - 1. Two hydraulic drive grates driven by three 60-hp motors G2-201-HD, G2-202-HD, G2-203-HD (standby);
 - 2. 75-hp Cooling Fan G2-231-FA, provides ambient air for Cooler G2-200-CC compartment #1;
 - 3. 150-hp Cooling Fan G2-233)-FA provides ambient air for Cooler G2-200-CC compartment #2;
 - 4. 200-hp Cooling Fan G2-235-FA, provides ambient air for Cooler G2-200-CC compartment #3;
 - 5. 250-hp Cooling Fan G2-237-FA, provides ambient air for Cooler G2-200-CC compartment #4;
 - 6. 150-hp Cooling Fan G2-239-FA, provides ambient air for Cooler G2-200-CC compartment #5;
 - 7. 125-hp Cooling Fan G2-241-FA, provides ambient air for Cooler G2-200-CC compartment #6;
 - 8. 125-hp Cooling Fan G2-243-FA, provides ambient air for Cooler G2-200-CC compartment #7;
 - 9. 100-hp Cooling Fan G2-245-FA, provides ambient air for Cooler G2-200-CC compartment #8;
 - 10. Eight 0.5-hp Louver Dampers G2-230-DA, G2-232-DA, G2-234-DA, G2-235-DA, G2-238-DA, G2-240-DA, G2-242-DA, and G2-244-DA, provides flow control to each of the eight Cooler compartments;
 - 11. Tipping Valves G2-210-TV through G2-217-TV provide material flow control from each of eight Cooler G2-200-CC compartments to 15-hp Drag Chain G2-206-DG; and
 - 12. 50-hp Clinker Breaker G2-205-CB reduces size of clinker prior to discharge to Deep Pan Conveyor G4-100-DP.
- B. Clinker Cooler Vent and Dust Return equipment, including:
 - 1. Heat Exchanger G6-200-HX with six-40 hp blowers receives Cooler G2-200-CC vent gases for cooling prior to Dust Collector G6-210-DC;
 - 2. 15-hp Screw Conveyor G6-202-SC transfers material from Heat Exchanger G6-200-HX to 20-hp Screw Conveyor G6-213-SC;
 - 3. Manual 12 in. Tipping Valve G6-203-TV controls material flow from Screw Conveyor G6-202-SC to Screw Conveyor G6-213-SC;
 - 4. Manual 2x8 Isolation Dampers G6-250-DA through G6-265-DA isolate Dust Collector G6-210-DC compartments from Cooler G2-200-CC vent air flow;
 - 5. Eight Shut-Off Gates G6-240-GA through G6-247-GA shuts off material flow from Dust Collector G6-210-DC hoppers to 20-hp Screw Conveyors G6-211-SC and G6-212-SC;
 - 6. Eight 0.5-hp Tipping Valves G6-190-TV through G6-197-TV control material flow from each of eight Dust Collector Hoppers to Screw Conveyors G6-211-SC and G6-212-SC;
 - 7. 20-hp, 18 in. Screw Conveyor G6-213-SC transfers material from Screw Conveyor G6-202-SC, G6-211-SC and G6-212-SC to Screw Conveyor G6-216-SC;

- 8. 25-hp, 18 in. Screw Conveyor G6-216-SC from Screw Conveyor G6-213-SC to Deep Pan Conveyor G4-100-DP;
- 9. 0.5-hp Louver Damper G6-215-DA controls vent air flow to Dust Collector G6-210-DC;
- C. Clinker Silo Feed equipment vented to Dust Collector G4-125-DC equipped with a 20-hp exhaust fan G4-126-FA (both shared with PTO 1221009D), including:
 - 1. 60-hp Deep Pan Conveyor G4-100-DP receives material from Clinker Cooler G2-200-CC and discharges to Clinker Storage Silo D3-100-SS.
- D. Clarcor, Model 120TB-BHT-100 dust collector G4-120-DC with a 20-hp exhaust fan G4-121-FA, including:
 - 1. Tipping Valve G4-122-TV controls material flow from Clarcor dust collector to Deep Pan Conveyor G4-100-DP.

OPERATIONAL CONDITIONS:

- 1. Clarcor, Model 120TB-BHT-100 G4-120-DC dust collector shall be equipped with a pulse jet cleaning mechanism. (Rule 210.1)
- 2. Clinker Cooler fabric collector stack shall be equipped with continuous emission monitors/recorders, secured against tampering after calibration, for particulate matter. (Rules 210.1 and 423 Subpart LLL)
- 3. Clarcor Model 120TB-BHT-100 G4-120-DC dust collector shall be equipped with an operational differential pressure indicator. (Rule 210.1)
- 4. Visible emissions from any single emission point, other than the clinker cooler exhaust stack, shall not exceed 10% opacity. (Rule 422 Subpart F)
- 5. Ducting shall remain airtight & sealed. (Rule 210.1)
- 6. Particulate matter emissions from any single source operation shall not exceed 0.1 gr/scf. (Rule 404.1)
- 7. Each compartment of dust collector G6-210-DC shall be equipped with an operational differential pressure indicator. (Rule 210.1)
- 8. Permittee shall maintain hourly PM Continuous Parametric Monitoring System (CPMS) readings and corresponding clinker production, and such records shall be readily available upon District request. (Rule 210.1)
- 9. Clinker cooler exhaust stack G6-225-SK shall be equipped with permanent sampling ports, sampling platform, and access ladder. (Rule 108.1)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Emission Unit 008 Permit Conditions

Dust Collector G6-210-DC:

Particulate Matter (PM₁₀):

0.01 gr/acfm 0.07 lb/ton of clinker (Rule 423, 40 CFR Part 63 Subpart LLL) 12.51 lb/hr 300.34 lb/day 54.81 ton/yr

Clarcor Dust Collector G4-120-DC:

Particulate Matter (PM₁₀):

0.005 gr/scf 0.19 lb/hr 4.63 lb/day 0.85 ton/yr

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

Compliance with daily emission limits shall be verified by record keeping (Visible Emission Evaluation). Compliance with annual emission limits shall be demonstrated by records which sum facility emissions on a quarterly basis. All records shall be kept on site and made readily available to District personnel upon request. (Rules 209 and 210.1) All records shall be kept on site and made readily available to District personnel upon request and made readily available to District for period of five years.

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	Description of Source
1221	009	Clinker Storage & Reclaim Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Clinker Storage Silo vented to Dust Collector G4-125-DC and Exhaust Fan G4-126-FA both shared with EU 008, including:
 - 1. One 50,000 ton Clinker Silo D3-100-SS receives clinker from Deep Pan Conveyor G4-100-DP (EU 008).
- B. Clinker Withdrawal and Conveying System vented to Dust Collector E1-225-DC and 10-hp Exhaust Fan E1-226-FA, and Dust Collector E1-232-DC and 20-hp Exhaust Fan E1-233-FA, including:
 - 1. Three Dustless Feeders E1-215-DF through E1-217-DF transfers clinker from Silo D3-100-SS to Apron Conveyor E1-220-AP;
 - 2. One 30-hp Apron Conveyor E1-220-AP conveys clinker to Transfer Tower #1 and to Diverter Gate E1-205-GA and E1-206-GA;
 - 3. Pneumatic Diverter Gate E1-205-GA from Apron Conveyor E1-220-AP to Truck Loading Spout E1-207-LS vented to Dust Collector E1-225-DC and Exhaust Fan E1-226-FA or Belt Conveyor E1-240-BC;
 - 4. Pneumatic Diverter Gate E1-206-GA from Apron Conveyor E1-220-AP to Belt Conveyor E1-230-BC;
 - 5. One 3/4-hp Loading Spout E1-207-LS loads trucks for transfer to outside storage; and
 - 6. One 20-hp 24 in. Belt Conveyor E1-230-BC transfers clinker from Diverter Gate E1-206-GA and discharges into Finish Mill Clinker Bin E3-110-BI vented to Dust Collector E1-232-DC and Exhaust Fan E1-233-FA.
- C. Clinker Reclaim and Gypsum Feed System vented to Dust Collector E3-130-DC and 20-hp Exhaust Fan E3-131-FA and Dust Collector E1-232-DC and Exhaust Fan E1-233-FA, including:
 - One 20 ton Feed Hopper E1-104-HP receives clinker or gypsum from loader to Belt Conveyor E1-105-BC;
 - 2. One 30-hp 24 in. Belt Conveyor E1-105-BC transports clinker and gypsum from feed hopper E1-104-HP to Rotary Distributor E1-107-DI;
 - 3. One 0.75-hp Rotary Distributor E1-107-DI receives material from Belt Conveyor E1-105-BC and discharges to Clinker Bin E3-110-BI, Clinker-Gypsum Bin E3-100-BI, or Gypsum Bin E3-100-BI, or Gypsum Bin E4-110-BI;
 - 4. One 650 ton Clinker Bin E3-110-BI, one 650 or 350 ton Clinker-Gypsum Bin E3-100-BI and one 350 ton Gypsum Bin E4-110-BI for holding clinker and gypsum for proportioned withdrawal as mill feed for B-3 Finish Mill E3-300-FM and B-4 Finish Mill E4-300-FM; and
 - Outside Clinker Storage area 5 acres or less and Reclaim Hopper E1-104-HP, located west of finish mill feed bins and around reclaim feed hopper, Feed Hopper E1-104-HP to Belt Conveyor E1-105-BC discharging to Clinker-Gypsum Bins E3-100-BI, E3-110-BI or E4-110-BI.

- D. Clinker Conveying System including:
 - 1. 300-ft. by 36-in. covered Clinker Belt Conveyor E1-240-BC with 10-hp motor transporting clinker from transfer tower to "Un-elevator;" 009
 - 2. "Un-Elevator" receiving clinker from Belt Conveyor E1-240-BC, and
 - 3. MAC Model MSS8 cartridge fabric collector, E1-245-DC, serving Un-Elevator.

OPERATIONAL CONDITIONS:

- 1. Each fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Each fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Belt conveyor(s) shall be equipped with dust-tight cover. (Rule 210.1)
- 4. There shall be no visible emissions from fabric collectors G4-125-DC, E1-130-DC, and E1-232-DC and conveyors. (Rule 210.1)
- 5. Visible emissions from fabric collectors E1-225-DC and E1-245-DC shall not exceed 5% opacity or Ringelmann No. ¼. (Rule 210.1)
- 6. Fabric collectors shall be maintained in proper working order. (Rule 209)
- 7. Fabric dust collector E1-225-DC volumetric exhaust flow rate shall not exceed 6,000 actual cubic feet per minute (acfm) $\pm 10\%$. (Rule 210.1)
- 8. Fabric dust collector E1-245-DC volumetric exhaust flow rate shall not exceed 2,700-acfm $\pm 10\%$. (Rule 210.1)
- 9. Particulate matter exhaust concentration from fabric collectors E1-225-DC and E1-245-DC shall not exceed 0.01 gr/scf. (Rule 210.1 BACT Requirement)
- 10. Operation of fabric dust collector E1-245-DC not exceed 1,200-hours/year. (Rule 210.1)
- 11. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector El-225-DC in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR 64)
- 12. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422,
- 13. Subpart F)
- 14. Clinker silo(s) shall serve as primary clinker storage. (Rule 210.1 BACT Requirement)
- 15. All conveyors transporting dry material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
- 16. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 17. Process shall not be operated unless emission control equipment is in operation. (Rules 210.1 and 209)
- 18. Material collected/removed from dust collector(s) shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 19. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 20. Tehachapi Cement Plant shall keep accurate daily records of process weight rates and make such records readily available to District upon request. (Rule 210.1)
- 21. Adequate provisions shall be made for stack sampling consistent with U. S. EPA test methods. (Rule 108.1)
- 22. 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)
- 23. 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 hourly and concentration emission limits on any fabric collector(s) shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

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

Particulate Matter (PM10):

Fabric Collector G4-125-DC 5000-acfm	0.002 0.09 2.06 0.38	gr/acf lb/hr lb/day tons/yr
Fabric Collector E1-130-DC 4200-acfm	0.002 0.07 1.73 0.32	gr/acf lb/hr lb/day tons/yr
Fabric Collector E1-232-DC 5000-acfm	0.002 0.09 2.06 0.38	gr/acf lb/hr lb/day tons/yr
Fabric Collector E1-225-DC 6000-acfm Subject to CAM	0.01 0.51 12.34 2.25	gr/acf lb/hr lb/day tons/yr
MAC Fabric Collector E1-245-DC (Model SS8) 2700-acfm	0.005 0.12 2.78 0.07	gr/acf lb/hr lb/day 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)

<u>Facility</u> <u>Number</u>	Emissions <u>Unit</u>	Description of Source
1221	010	B-3 Finish Mill

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Finish Mill Feed Proportioning System vented to Dust Collector E3-135-DC and 10-hp Exhaust Fan E3-136-FA, including:
 - 1. Three 30 in. 2-hp Weighfeeders with Drag Chains E3-205-WF, E3-202-WF, and E3-213-WF from Clinker and Gypsum Bins E3-110-BI, E3-100-BI, and E4-110-BI to Belt Conveyor E3-216-BC; and
 - 2. One 24 in. 10 hp Belt Conveyor E3-216-BC from Weighfeeders E3-205-WF, E3-202-WF, and E3-213-WF to B-3 Finish Mill E3-300-FM, vented to Dust Collector E3-137-DC and at discharge end to Dust Collector E3-345-DC.
- B. Finish Mill and Auxiliary Equipment vented to Dust Collector E3-345-DC and Exhaust Fan E3-346-FA (30,000 CFM Max., 200 hp), including:
 - 1. One 3,000 hp B-3 Finish Mill E3-300-FM two compartment mill grinds proportioned clinker-gypsum mix from Belt Conveyor E3-216-BC to Bucket Elevator E3-320-BE;
 - 2. One 60 hp Bucket Elevator E3-320-BE from B-3 Finish Mill E3-300-FM to Airslide E3-322-AS;
 - 3. One 16 in. Airslide E3-322-AS from Bucket Elevator E3-320-BE to Air Separator E3-370-SE; Two 5 hp Blowers E3-325-BL and E3-321-BL provides product conveying air for Airslide E3-322-AS:
 - 5. One 1 hp Cement Sampler E3-360-SX located in Hopper E3-359-HP, automatically withdraws sample from finished cement E3-stream to Cement Pump E3-400-FK;
 - 6. One 400 hp Air Compressor-Duplex E3-401-AC and E3-402-AC provides product conveying air for Cement Pump E3-400-FK;
 - 7. One 5 hp Screw Conveyor E3-347-DC transfers Dust Collector E3-345-DC product return to E3-350-SC with Rotary Airlock E3-351-RA to E3-322-AS;
 - 8. One 5 hp Screw Conveyor E3-349-SC transfers Dust Collector E3-345-DC product return to E3-350-SC with Rotary Airlock E3-351-RA to E3-322-AS;
 - 9. One screw conveyor E3-350-SC receives Dust Collector E3-345-DC product return from Screw Conveyor E3-347-SC or E3-349-SC to Rotary Airlock E3-351-RA to Airslide E3-322-AS.
 - 10. One 14 in. Airslide E3-330-AS from Airslide E3-322-AS to Airslide E3-332-AS;
 - 11. One 14 in. Airslide E3-332-AS from Airslide E3-330-AS;
 - 12. One 20 hp Blowers E3-331-BL provides product conveying air for Airslide E3-322-AS, Airslide E3-330-AS and Airslide E3-332-AS;
 - 13. Air Separator Distribution Plate E3-340-DI from Airslide E3-322-AS;

- C. Dust Collector E3-385-DC and Exhaust Fan E3-386-FA (78,000 cfm, 700 hp), including:
 - 1. Air Separator E3-370-SE from Airslide E3-322-AS. Mill product is separated using Polysius SEPOL high efficiency separator by circulating air into finished and unfinished cement. Finished product flows through Airslides E3-390-AS and E3-391-AS to Airslide E3-392-AS or through Cooler Bypass Diverter Gate E3-393-GA to Cement Pump E3-400-FK. Unfinished product returns to B-3 Finish Mill E3-300-FM;
 - 2. Airslide E3-392-AS from Air Separator Discharge Gate E3-393-GA to Cement Cooler E3-325-CX;
 - 3. Cement Cooler E3-325-CX from airslide E3-392-AS, cooler discharges to airslide E3-399-AS;
 - 4. Airslide E3-399-AS from Cooler E3-325-CX to Cement Pump E3-400-FK;
 - 5. Blowers E3-326-BL, E3-327-BL, E3-396-BL, E3-398-BL provide product conveying air to airslides E3-390-AS, E3-391-AS, El-392-AS, and E3-399-AS; and
 - 6. One 200 hp Cement Pump E3-400-FK from Air Separator E3-370-SE through Cement Cooler E3-395-CX or through Cooler Bypass Diverter Gate E3-393-GA to twelve "A" Cement Storage Silos J6-401-SS to J6-412-SS (EU 001) and/or Cement Storage Silo J1-300-SS (EU 012).

OPERATIONAL CONDITIONS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Emission Unit 010 Permit Conditions

Particulate Matter (PM₁₀):

E3-135-DC Baghouse:	0.01	grains/acf
	0.22	lb/hr
	5.18	lb/day

E3-137-DC Baghouse:

E3-345-DC Baghouse: 0.01 grains/acf

1.54 lb/hr 37.03 lb/day

E3-385-DC Baghouse: 0.01 grains/acf

4.01 lb/hr 96.27 lb/day

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

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

<u>Facility</u> <u>Number</u>	Emissions <u>Unit</u>	Description of Source
1221	011	B-4 Finish Mill

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Finish Mill Feed Proportioning System vented to Dust Collector E4-135-DC and 10 hp Exhaust Fan E4-136-FA, including:
 - 1. Three 2-hp 30 in. Weigh Feeders with Drag Chains E4-205-WF, E4-202-WF, and E4-213-WF from Clinker and Gypsum Bins E3-110-BI, E3-100-BI, and E4-110-BI to Belt Conveyor E4-216-BC; and
 - 2. One 15 hp 24 in. Belt Conveyor E4-216-BC from Weigh Feeders E4-205-WF, E4-202-WF, and E4-213-WF to Belt Conveyor E4-220-BC, to Dust Collector E4-137-DC and discharge end vented to Dust Collector E4-430-DC.
- B. Finish Mill and Separator Feed Handling System vented to Dust Collector E4-430-DC and 5750 CFM, 20 hp Exhaust Fan E4-431-FA, including:
 - 1. One 3 hp 30 in. Belt Conveyor E4-220-BC receives proportioned clinker/gypsum feed to transfer to Finish Mill E4-300-FM or, when reversed, to truck for calibration check through loading spout E1-207-LS;
 - 2. One 20 in. Airslide E4-301-AS from Finish Mill E4-300-FM to Bucket Elevator E4-305-BE;
 - 3. One 5 hp Blower E4-335-BL provides product conveying air to Airslide E4-301-AS and Ball Trap E4-302-BT in Airslide E4-301-AS;
 - 4. Ball Trap E4-302-BT air fluidized box in Airslide E4-301-AS to remove tramp metal from mill discharge stream to Bucket Elevator E4-305-BE;
 - 5. One 150 hp Bucket Elevator E4-305-BE from Airslide E4-301-AS discharges to Airslide E4-310-AS;
 - 6. One 20 in. Airslide E4-310-AS from Bucket Elevator E4-305-BE to Airslide E4-314-AS;
 - 7. One 20 in. Airslide E4-314-AS from Airslide E4-310-AS to Separator Feed Distributor E4-311-DI through flowmeter E4-332-FL;
 - 8. Distributor E4-311-DI from Airslide E4-314-AS to separator feed Airslides E4-312-AS and E4-313-AS;
 - 9. Two 14 in. Airslides E4-312-AS and E4-313-AS from Distributor E4-311-DI to Separator E4-320-SE; and
 - 10. One 15 hp Blower E4-315-BL provides product conveying air to Airslides E4-310-AS, E4-312-AS, E4-313-AS, and E4-314-AS.
- C. B-4 Finish Mill Grinding and Mill Ventilation System to Dust Collector E4-420-DC and 200 hp Exhaust Fan E4-421-FA, including:
 - 1. One 3,000 hp Finish Mill E4-300-FM: Two compartment mill grinds proportioned clinker/gypsum mix from Belt Conveyor E4-220-BC discharges to Airslide E4-301-AS;
 - 2. One 15 hp 14 in. Screw Conveyor E4-423-SC transfers collected dust from Dust Collector E4-420-DC to Screw Conveyor E4- 424-SC;

- 3. One 25 hp 14 in. Screw Conveyor E4-424-SC from Screw Conveyor E4-423-SC to Airslide E4-301-AS; and
- 4. One 3 hp 14 in. Screw Conveyor E4-425-SC from Screw Conveyor E4-424-SC to Airslide E4-301-AS.
- D. B-4 Finished Cement Product System, including:
 - 1. One 200 hp Separator E4-320-SE receives mill product from Airslides E4-312-AS and E4-313-AS, separates finished product by air from transfer to Dust Collector E4-410-DC and returns unfinished material to Finish Mill E4-300-FM;
 - 2. Dust Collector E4-410-DC receives airborne cement from Separator E4-320-SE, removes particulate as product and product discharges in Airslides E4-345-AS, E4-346-AS, E4-347-AS, and E4-348-AS;
 - 3. One 700 hp Exhaust Fan E4-411-FA vents Dust Collector E4-410-DC;
 - 4. Four 10 in. Airslides E4-345-AS, E4-346-AS, E4-347-AS, and E4-348-AS from Dust Collector E4-410-DC to Airslide E4-355-AS (E4-352-AS and E4-354-AS are integral with E4-355-AS);
 - 5. One 13 in. Airslide E4-355-AS from Airslides E4-345-AS through E4-348-AS to Cement Cooler E4-360-CX or to Cooler Bypass Airslide E4-350-AS;
 - 6. One 13 in. Airslide E4-350-AS receives cement from Airslide E4-355-AS through cooler bypass to Sampler E4-361-SX;
 - 7. One 15 hp Blower E4-349-BL provides product conveying air to Airslides E4-345-AS, E4-346-AS, E4-347-AS, E4-348-AS, E4-355-AS, E4-351-AS, E4-354-AS, and E4-350-AS;
 - 8. One 125 hp Cement Cooler E4-360-CX cools finished cement received from Airslide E4-355-AS and discharges to Sampler E4-361-SX; and
 - 9. One 1 hp Sampler E4-361-SX extracts cement sample from product stream enroute to Pump E4-400-FK.
- E. B-4 Finished Cement Pump System vented to Dust Collector E4-403-DC and 1.5 hp Exhaust Fan E4-404-FA, including:
 - 1. One 125 hp Cement Pump E4-400-FK receives cement from Airslide E4-350-AS to Cement Storage-Loadout Silos J3-100-SS and J3-101-SS and/or twelve "A" Silos J6-401-SS to J6-412-SS (EU 001) and/or cement storage and loadout operation (EU 012); and
 - 2. Duplex 400 hp Air Compressor E4-380-AC and E4-401-AC provides product conveying air for Cement Pump E4-400-FK.

OPERATIONAL CONDITIONS:

- 1. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, 40 CFR Part 60 Subpart F)
- 2. Visible emissions from fabric collector E4-410-DC shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
- 3. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
- 4. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 5. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
- 6. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 209)

Emission Unit 011 Permit Conditions

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSIONS LIMITS:

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

Particulate Matter (PM₁₀):

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

Facility Emissions		
Number	<u>Unit</u>	Description of Source
1221	012	Cement Storage Silo & Loadout Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

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

Emission Unit 012 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Particulate Matter (PM10):

Fabric Collector J1-331-DC: 0.44 lb/hr

Fabric Collector J2-105-DC: 0.10 lb/hr

Fabric Collector J2-115-DC: 0.10 lb/hr

Fabric Collector J2-205-DC: 0.10 lb/hr

Fabric Collector J2-215-DC: 0.10 lb/hr

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

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

Emission Unit 013 Permit Conditions

Facility	Emissions		
Number	<u>Unit</u>	Description of Source	
1221	013	Outdoor Storage & Reclaim Operation	

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

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

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

(Fugitive dust from storage piles and handling)	220.20	lb/day
Additional (when crushers, EU 001 and 002, are shutdown)	50.40	lb/day

Emission Unit 013 Permit Conditions

Additional (when kiln, EU 007, is shutdown)	429.60	lb/day
Additional (when clinker cooler, EU 008, is shutdown)	333.38	lb/day
Additional (when B-3 finish mill, EU 010, is shutdown)	79.34	lb/day
Additional (when B-4 finish mill, EU 011, is shutdown)	127.20	lb/day

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

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

Emission Unit 014 Permit Conditions

Facility	Emissions	
<u>Number</u>	<u>Unit</u>	Description of Source
1221	014	Quarry Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Quarry Operation, including following equipment:

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

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)

Emission Unit 015 Permit Conditions

Facility Emissions

Versions

Number Unit Description of Source

1221 015 Piston Engine with Welder #R5-508

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf (0.2 gr/scf if installed before 4/18/72). (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (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 016 Permit Conditions

Facility
NumberEmissions
UnitDescription of Source1221016Emergency Use Piston Engine with Generator #M2-101

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
- 4. Engine operation shall not exceed 200 hours per year or shall be subject to additional permit requirements. (Rules 210.1 and 427)
- 5. Pursuant to 40 CFR 70.6 (f), the Eastern Kern Air Pollution Control District expressly states that a Permit Shield is incorporated herein that determined 40 CFR part 60 subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines is not applicable to this Source. This permit shield does not apply if the source meets the following criteria in accordance with 40 CFR § 60.4200:
 - a. Source owner or operator commences construction or reconstruction of compression ignition (CI) Internal Combustion Engine (s) (ICE) in accordance with \S 60.4200 (a) (2) (4).

Emission Unit 017 Permit Conditions

Facility
NumberEmissions
UnitDescription of Source1221017Emergency Use Piston Engine with Generator

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

- 1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
- 4. Engine operation shall be no more than 200 hours per year (excluding routine maintenance/check startups). (Rule 427)
- 5. Pursuant to 40 CFR 70.6 (f), the Eastern Kern Air Pollution Control District expressly states that a Permit Shield is incorporated herein that determined 40 CFR part 60 subpart IIII Standards of Performance for Stationary Compression Ignition Internal Combustion Engines is not applicable to this Source. This permit shield does not apply if the source meets the following criteria in accordance with 40 CFR § 60.4200:
 - a. Source owner or operator commences construction or reconstruction of compression ignition (CI) Internal Combustion Engine (s) (ICE) in accordance with \S 60.4200 (a) (2) (4).

Facility	Emissions	
Number	<u>Unit</u>	Description of Source
1221	019	Primary and Secondary Crusher

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A Rock Breaker B1-004-BB;
- B. Primary Feed Hopper B2-003-HP, 200 cubic yard capacity, served by Item Z;
- C. Apron Feeder B2-006-AP, 82 in. x 38 ft., driven by 150 hp electric motor;
- D. Spillage Conveyor B2-007-DG, 84 in. x 37 ft., driven by 10 hp electric motor;
- E. Hydraulic System B2-008-PU, 5000 gpm, driven by 10 hp electric motor;
- F. Vibrating Grizzly B2-015-VS, 1200 tph, ventilated by Item J. and driven by 100 hp electric motor;
- G. Belt Conveyor B2-200-BC, 48 in. x 90 ft., ventilated by Item J. and driven by 100 hp electric motor;
- H. Impact Crusher B2-020-CU, 1000 tph, ventilated by Item J. and driven by 1600 hp electric motor;
- I. Belt Conveyor B2-030-BC, 70 in. x 50 ft., ventilated by Item J. and driven by 40 hp electric motor;
- J. Fabric Collector B2-120-DC), 38310 cfm with 100-hp exhaust fan B2-121-FA, including:
 - 1. Screw Conveyor B2-125-SC, 12 in. dia. x 35 ft., driven by 10 hp electric motor,
 - 2. Rotary Airlock, FT 12 B2-126-RA, driven by 3 hp electric motor, and
 - 3. Screw Conveyor B2-127-SC, 12 in. x 20 ft., discharging only to Item K. and driven by 3 hp electric motor;
- K. Belt Conveyor B2-040-BC, 48 in. x 620 ft., ventilated by Item N. and driven by 75 hp electric motor;
- L. Controlled Feed Bin B2-060-BI, 500 tph, ventilated by Item N;
- M. Apron Feeder B2-070-AP, 55 in. x 20 ft., ventilated by Item N. and driven by 7.5 hp electric motor;
- N. Fabric Collector B2-160-DC), 3250 cfm with 7.5-hp exhaust fan B2-161-FA, including:
 - 1. Rotary Airlock, FT 12 B2-162-RA, discharging only to Item L. and driven by 1.5 hp electric motor;
- O. Belt Conveyor B2-080-BC, 48 in. x 89 ft., ventilated by Item Q. and driven by 15 hp electric motor;
- P. Overland Belt Conveyor C3-001-BC (200-BC-7) (existing), ventilated by Item Q;
- Q. Fabric Collector B2-090-DC), 3250 cfm with 7.5-hp exhaust fan B2-091-FA, including:
 - 1. Rotary Airlock, FT 12 B2-096-RA, discharging only to Item P. and driven by 1.5 hp electric motor;
- R. Belt Conveyor B2-210-BC, 36 in. x 305 ft., ventilated by Item Y. and driven by 100 hp electric motor;
- S. Vibrating Screen B2-220-VS, 950 tph, ventilated by Item Y. and driven by 80 hp electric motor;
- T. Stacker Belt Conveyor B2-230-BC, 36 in. x 376 ft., ventilated by Item Y. and discharge served by Item Z. and driven by 100 hp electric motor;
- U. DG Storage Pile;
- V. DG Weigh Feeder B2-240-WF, 36 in. x 58 ft., ventilated by Item Y. and driven by 7.5 hp electric motor:
- W. Stacker Belt Conveyor B2-250-BC, 36 in. x 333 ft., ventilated by Item Y. and discharge served by Item Z. and driven by 40 hp electric motor;

- X. Strategic Stone Storage Pile;
- Y. Fabric Collector B2-320-DC, 5,600 sq. ft. filtering area, 336 bags, 20,000 cfm, including:
 - 1. Fabric Collector Fan B2-321-FA, driven by 50 hp electric motor,
 - 2. Screw Conveyor B2-325-SC, 12 in. x 14 ft., driven by 10 hp electric motor, and
 - 3. Rotary Airlock, FT 16 B2-326-RA, discharging only to Item K. and driven by 2 hp electric motor;
- Z. Water Spray System B2-350-WS, powered by water pump, Item AA;
- AA. Water Pump B2-355-PU, 1000 gpm, driven by 50 hp electric motor; and
- BB. Dust Collectors/Water Spray System Air Compressor B2-803-AC, powered by 50 hp electric motor.

OPERATIONAL CONDITIONS:

- 1. Each fabric collector shall be equipped with operational pressure differential indicator. (Rule 210.1)
- 2. Fabric collector exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with U. S. EPA test methods, i.e. capped sample ports in accessible location of uniform flow. (Rule 108.1)
- 3. Fabric collector, related piping, and connections shall be maintained dust-tight; i.e. equipment shall be maintained so as not to allow fugitive emissions. (Rules 209 and 210.1)
- 4. Screw conveyors and belt conveyors shall be covered while operational. (Rule 210.1 BACT Requirement)
- 5. Visible emissions from fabric collector stacks and conveyors, including storage pile conveyor discharge points, shall not exceed 5% opacity. (Rules 210.1 BACT Requirement)
- 6. Particulate matter emission concentration from each fabric collector exhaust stack shall not exceed 0.01 gr/scf. (Rules 210.1 BACT Requirement)
- 7. Material removed from each fabric collector and other collected fines shall be returned to product stream or otherwise disposed of using a method preventing entrainment in atmosphere. (Rules 210.1 and 210.1 BACT Requirement)
- 8. Each fabric collector pulse-jet cleaning mechanism shall be provided with compressed air supply of adequate pressure and volume. (Rule 210.1)
- 9. Visible emissions generated by front-end loaders adding material into primary feed hopper shall not exceed 15% opacity. (Rule 422, 40 CFR Part 60 Subpart OOO)
- 10. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector B2-120-DC, B2-320-DC, and B2-160-DC in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR 64)
- 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)
- 12. Air Pollution Control Officer (APCO) or any authorized representative shall have access to and copies of any record required to be kept under terms and conditions of permit. Furthermore, such persons shall have access to inspect any equipment, operation or method required in this permit, and to sample, or require sampling, of emissions from source. (Rule 107)
 - 1. 12.

LOCALLY ENFORCEABLE CONDITIONS:

1. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rule 111. (Rule 111)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

Fabric Collector B2-120-DC:	0.01	gr/dscf
Subject to CAM	3.22	lb/hr
	77.32	lb/day
	14.11	ton/yr
Fabric Collector B2-320-DC:	0.01	gr/dscf
Subject to CAM	1.68	lb/hr
	40.37	lb/day
	7.37	ton/yr
Fabric Collector B2-160-DC:	0.01	gr/dscf
Subject to CAM	0.27	lb/hr
•	6.56	lb/day
	1.20	ton/yr
Fabric Collector B2-090-DC:	0.01	gr/dscf
	0.17	lb/hr
	4.04	lb/day
	0.74	ton/yr
Crushing, Transfer, and Loading:	0.26	lb/hr
	6.29	lb/day
	1.15	ton/yr

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

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

Facility Emissions

Number Unit Description of Source

1221 021 Quarry Drilling Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Quarry Drilling Operation, including following equipment:

- A. Furukawa 1500 primary quarry drill powered by Cummins, Model QSC8.3C, 305 bhp diesel fueled piston engine equipped with turbocharger and after-cooled and crankcase ventilation (engine permit exempt; Rule 202.I.B, CH&SC §42310(a)(1)); and
- B. Dust collection system and water injection dust suppression system

OPERATIONAL CONDITIONS:

- 1. Drill shall be equipped with water injection system and dust collector. (Rule 210.1 BACT Requirement)
- 2. Drilling rate shall not exceed 48 holes per day without prior District approval. (Rule 210.1)
- 3. Operation of drill shall not exceed 8,760 hours per year without prior District approval. (Rule 210.1)
- 4. Visible emissions from drilling operation shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 5. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 6. Water injection system and dust collector shall be in operation during drilling operation. (Rule 210.1)
- 7. Work area and quarry site shall be maintained in damp condition with use of water sprays to prevent fugitive dust emissions. (Rules 401 and 402)
- 8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
- 9. Owner/operator shall not cause or allow fugitive dust emissions from any active operations, except unpaved roads, to remain visible in atmosphere beyond property line. (Rule 402)
- 10. 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)
- 11. Owner/ operator shall submit/have a current fugitive dust plan on file in District office. (Rule 402)
- 12. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. (Rules 209 and 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 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 021 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:

Maximum emission rate of each air contaminant from Quarry Operation shall not exceed following emissions limitations (hourly limits may be averaged over 24 hour period):

Particulate Matter:

 $0.04 \text{ lb/hr (of PM}_{10})$ $0.95 \text{ lb/day (of PM}_{10})$ $0.17 \text{ ton/yr (of PM}_{10})$

(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 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)

<u>Facility</u> <u>Number</u>	<u>Emissions</u> <u>Unit</u>	Description of Source
1221	022	Aboveground Gasoline Storage & Dispensing Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

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

OPERATIONAL CONDITIONS:

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

Emission Unit 022 Permit Conditions

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

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

SPECIAL CONDITION:

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

Emission Unit 023 Permit Conditions

Facility	Emissions		
<u>Number</u>	<u>Unit</u>	<u>Description of Source</u>	
1221	023	Kiln Fabric Collector Fabric Transfer System	

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Two Pneumatic Flow-Control Gates S4-221-GA and S4-241-GA;
- B. Two Dosing Bins S4-222-BI and S4-242-BI;
- C. Two Rotary Feeders S4-223-RF and S4-243-RF each with 2.9-hp motor;
- D. Two Air Slides S4-135-AS and S4-129-AS with Blowers S4-136-BL and S4-129-AS respectively;
- E. Two Rotary Piston Blowers S4-226-BL and S4-246-BL each with 100-hp motor; and
- F. Two IBAU Material Pumps S4-225-FK and S4-245-FK each with 29.5-hp motor.

OPERATIONAL CONDITIONS:

- 1. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Particulate matter emissions from fabric collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 4. Visible emissions from fabric collectors E3-385-DC (associated with EU 010) and E4-410-DC (associated with EU 011) shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
- 5. Fabric dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 6. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 7. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
- 8. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 11. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Emission Unit 023 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 (PM₁₀):

Fabric Collector E3-385-DC: (Listed on EU 010)	0.01 4.01 96.27 17.87	gr/scf (Rule 210.1 BACT Requirement) lb/hr lb/day tons/yr
Fabric Collector E4-410-DC: (Listed on EU 011)	0.01 3.36 87.14 150.22	gr/scf (Rule 210.1 BACT Requirement) lb/hr lb/day 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 024 Permit Conditions

Facility Emissions

Number Unit Description of Source

1221 024 Quarry Drilling Operation

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Quarry Drilling Operation, including following equipment:

- A. Ingersoll Rand DM-45 quarry drill powered with Cummins, Model QSK19-C, 600 bhp diesel fueled piston engine equipped with turbocharger and aftercooled and crankcase ventilation (engine permit exempt; Rule 202.I.B, CH&SC §42310(a)(1)); and
- B. Dust collection system and water injection dust suppression system

OPERATIONAL CONDITIONS:

- 1. Drill shall be equipped with drill hole water injection system and dust collector. (Rule 210.1 BACT Requirement)
- 2. Drilling rate shall not exceed 48 holes per day without prior District approval. (Rule 210.1)
- 3. Operation of drill shall not exceed 8,760 hours per year without prior District approval. (Rule 210.1)
- 4. Visible emissions from drilling operation shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 5. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
- 6. Water injection system and dust collector shall be in operation during drilling operation. (Rule 210.1)
- 7. Work area and quarry site shall be maintained in damp condition with use of water sprays to prevent fugitive dust emissions. (Rules 401 and 402)
- 8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
- 9. Owner/operator shall not cause or allow fugitive dust emissions from any active operations, except unpaved roads, to remain visible in atmosphere beyond property line. (Rule 402)
- 10. 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)
- 11. Owner/ operator shall submit/have a current fugitive dust plan on file in District office. (Rule 402)
- 12. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. (Rules 209 and 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 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:

Emission Unit 024 Permit Conditions

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 Quarry Operation shall not exceed following emissions limitations (hourly limits may be averaged over 24 hour period):

Particulate Matter (PM10):

0.04 lb/hr 0.95 lb/day 0.17 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 025 Permit Conditions

Facility Emissions

Number Unit Description of Source

1221 025 Alternative Fuel Storage & Cement Processing

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Alternate Fuels Handling System, including following equipment:

- 1. Docking Station;
- 2. Biomass grinder powered by 250-hp electrical motor;
- 3. Grinder supporting belt conveyor with 10-hp motor;
- 4. Two Stationary Mechanical Transport (15 HP each);
- 5. Fuel Dis-Agglomerator (15 HP);
- 6. Enclosed Hopper (15 HP);
- 7. 6 Screw Feeders (3 HP each);
- 8. Dosing Screw (7.4 HP);
- 9. Rotary Feeder (10 HP);
- 10. Pneumatic Feed Line;
- 11. Pneumatic Blower (150 HP); and
- 12. 4,415 cfm Dust Collector (15 HP)
- 13. Hydraulic Power Unit (30-hp)
- 14. 58' belt conveyor (15-hp)

DESIGN CONDITIONS:

a. Conveyor transporting biomass shall be covered (Rule 210.1 BACT Requirement)

OPERATIONAL CONDITIONS:

- 1. Visible emissions from pistachio shell unloading shall not exceed 5% opacity, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 2. Unloading of pistachio biomass shall not exceed 300 tons per day. (Rule 210.1)
- 3. Screw feeders must be enclosed. (Rule 210.1 BACT requirement)
- 4. Fabric collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 5. Fabric collector shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 6. Particulate matter emissions from fabric collector exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
- 7. Visible emissions from fabric collector shall not exceed 5% opacity (1/4 Ringelmann). (Rule 210.0 BACT Requirement)
- 8. Fabric collector volumetric flow rate shall not exceed 4,415 cubic feet per minute. (Rule 210.1)
- 9. All piping, ducting and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 10. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
- 11. Material collected in fabric dust collectors shall be disposed of in a manner preventing entrainment in atmosphere. (Rule 210.1)

Emission Unit 025 Permit Conditions

- 12. Equipment shall be maintained according to manufacturer's specifications. (Rule 210.1)
- 13. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR 64)
- 14. No emission shall cause injury, detriment, nuisance, or annoyance or endanger the comfort, repose, health or safety of any persons or have natural tendency to cause injury or damage to business or property. (Rule 419 and CH&SC §41700)
- 15. Owner/operator shall keep accurate daily records of alternative fuel loaded into docking station and make such records readily available to District upon request. (Rule 210.1)
- 16. Seals shall be maintained leak free. (Rule 210.1)
- 17. Emissions from docking station and feeders exhaust shall not exceed 20% opacity. (Rule 210.1 BACT requirement)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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 emissions rate of each air contaminant from this emission unit shall not exceed following limits:

Fabric Collector	0.01	gr/scf (Rule 210.1 BACT Requirement)
(@ 4,415-acfm)	0.38	lb/hr
Subject to CAM	6.05	lb/day
	1.59	tons/yr
Biomass Unloading Fugitive Emissions	3.70	lb/day
	0.67	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 209 and 210.1)

Emission Unit 026 Permit Conditions

Facility Emissions

Number <u>Unit</u> <u>Description of Source</u>

1221 026 Roller Press Unit

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Roller Press Unit, including following equipment:

- A. Cement Grinding Roller Press Main Drive Motor No 1 with 700-hp electric motor;
- B. Cement Grinding Roller Press Main Drive Motor No 2 with 700-hp electric motor;
- C. 2 Cement Grinding Roller Press Main Gear Boxes E2-301-GB each with 5-hp motor;
- D. 2 Cement Grinding Roller Press Main Gear Boxes E2-305-GB each with 5-hp motor;
- E. Cement Grinding HRP Auxiliary Drive with 5-hp motor;
- F. Cement Grinding Belt Conveyor E1-105-BC with 50-hp motor;
- G. Cement Grinding Belt Conveyor E1-231-BC with 7.5-hp motor;
- H. Cement Grinding Belt Conveyor E2-010-BC with 7.5-hp motor;
- I. Cement Grinding Belt Conveyor E2-330-BC with 15-hp motor;
- J. Cement Grinding Belt Conveyor E2-375-BC with 15.5-hp motor;
- K. Cement Grinding Belt Conveyor E2-390-BC with 7.5-hp motor;
- L. Cement Grinding Belt Conveyor E3-216-BC;
- M. Cement Grinding Spillage Conveyor E2-015-DG with 1.0-hp motor;
- N. Cement Grinding Spillage Conveyor E2-130-DG with 0.5-hp motor;
- O. Cement Grinding Spillage Conveyor E2-335-DG with 1.5-hp motor;
- P. Cement Grinding Spillage Conveyor E2-380-DG with 1.5-hp motor;
- Q. Cement Grinding Spillage Conveyor E2-395-DG with 1.5-hp motor;
- R. Cement Grinding Bucket Elevator E2-360-BE with 150-hp motor;
- S. Cement Grinding Bucket Elevator E2-360-BE with 15-hp motor;
- T. Cement Grinding Bucket Elevator E2-370-BE with 60-hp motor;
- U. Cement Grinding Bucket Elevator E2-370-BE with 7.5-hp motor;
- V. Cement Grinding Slide Hydraulic Gate E2-205-GA with 7.5-hp motor;
- W. Cement Grinding Pneumatic Pump E4-400-FK with 200-hp motor;
- X. Cement Grinding Magnetic Separator E2-340-MG with 5-hp motor;
- Y. Cement Grinding Magnetic Separator with 5-kW magnet;
- Z. Cement Grinding Metal Detector E2-020ED01 with 5-hp motor;
- AA. Cement Grinding Dust Collector E2-040-DC with 50-hp fan motor E2-022-FA;
- BB. Cement Grinding Dust Collector E2-110-DC with 50-hp fan motor E2-111-FA;
- CC. Cement Grinding Dust Collector E2-350-DC with 50-hp fan motor E2-351-FA;
- DD. Cement Grinding Dust Collector E2-372-DC with 60-hp fan motor;
- EE. Cement Grinding Dust Collector E2-387-DC with 50-hp fan motor;
- FF. Cement Grinding Air Slide E2-369-AS with 5-hp motor; and
- GG. Cement Grinding Weigh Feeder E2-125-WF with 7.5-hp motor.

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)

Emission Unit 026 Permit Conditions

- 3. Particulate matter emissions from each fabric collector r exhaust shall not exceed 0.005-gr/scf. (Rule 210.1 BACT Requirement)
- 4. Visible emissions from all fabric collectors shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
- 5. Fabric dust collector and shall be in operation when associated equipment is operated. (Rule 210.1)
- 6. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 7. All conveyors transporting dried material shall be covered, be leak-tight, have no visible emissions. (Rule 210.1)
- 8. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 9. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
- 10. Owner/operator shall conduct Compliance Assurance Monitoring (CAM) for dust collector E2-110-DC in accordance with District approved CAM plan. (Rule 201.1 and 40 CFR 64)
- 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 210.1)
- 12. 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 hourly and concentration emission limits on any fabric collector(s) shall be verified pursuant to Rule 108.1 and District Guidelines for Compliance Testing, within 60 days of District request. Test results shall be submitted to District within 30 days after test completion. (Rule 108.1 and 210.1)

EMISSION LIMITS:

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

Particulate Matter (as PM₁₀):

Fabric Collector E2-040-DC	0.005	gr/scf (Rule 210.1 BACT Requirement)
Operating at 6,047-acfm	0.32	lb/hr
	7.63	lb/day
	1.39	ton/yr
F.1.1. G.11. F2.110.FG	0.005	/ C(D 1 210 1 D 1 CT D
Fabric Collector E2-110-DC	0.005	gr/scf (Rule 210.1 BACT Requirement)
Operating at 7,416-acfm	0.25	lb/hr
Subject to CAM	6.03	lb/day
	1.10	ton/yr
Fabric Collector E2-350-DC	0.005	gr/scf (Rule 210.1 BACT Requirement)
- 33333 - 3333333 333 3		
Operating at 6,003-acfm	0.26	lb/hr
	6.17	lb/day
	1.13	ton/yr

Emission Unit 026 Permit Conditions

Fabric Collector E2-372-DC	0.005	gr/scf (Rule 210.1 BACT Requirement)
Operating at 9,217-acfm	0.40	lb/hr
	9.48	lb/day
	1.73	ton/yr
Fabric Collector E2-387-DC	0.005	gr/scf (Rule 210.1 BACT Requirement)
Operating at 5,861-acfm	0.25	lb/hr
	6.03	lb/day
	1.10	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 209 and 210.1)

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Emission Unit 027 Permit Conditions

Facility	Emissions	
Number	<u>Unit</u>	<u>Description of Source</u>
1221	027	New Vacuum Truck With Dust Collector

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Truck-Mounted Vacuum, including the following design specifications:

Guzzler CL vacuum truck powered with onboard 450-bhp diesel piston engine (permit exempt mobile engine) and equipped with first stage pre-filter, cyclone chamber, and baghouse.

OPERATIONAL CONDITIONS:

- 1. Vacuum truck dust collector shall have no visible emissions other than water vapor. (Rule 210.1)
- 2. Vacuum truck collector shall be equipped with operational differential pressure indicator. (Rule 210.1)
- 3. Vacuum truck collector shall all be equipped with pulse-jet cleaning mechanism or equivalent. (Rule 210.1)
- 4. Particulate matter emissions from vacuum truck dust collector exhaust shall not exceed 0.01 gr/scf. (Rule 210.1)
- 5. Vacuum truck collector volumetric exhaust flow rate shall not exceed 5,250 standard cubic feet per minute (scfm). (Rule 210.1)
- 6. Vacuum truck dust collector shall be in operation when associated equipment is operated. (Rule 210.1)
- 7. All piping, ducting, hatches, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
- 8. Material collected in vacuum truck collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 9. 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)
- 10. 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)
- 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)

Emission Unit 027 Permit Conditions

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Vacuum Truck Dust Collector Emissions:

Particulate Matter (PM₁₀): 0.01 gm/bhp-hr (ATCM requirement)

0.45 lb/hr 10.8 lb/day 1.97 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 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]

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.
§60.1(a)(2)	Except for compliance with 40 CFR 60.49b(u), the site shall have the option of either complying directly with the requirements of this part, or reducing the site-wide emissions caps in accordance with the procedures set forth in a permit issued pursuant to 40 CFR 52.2454. If the site chooses the option of reducing the site-wide emissions caps in accordance with the procedures set forth in such permit, the requirements of such permit shall apply in lieu of the otherwise applicable requirements of this part.
§60.1(a)(3)	Notwithstanding the provisions of paragraph (d)(2) of this section, for any provisions of this part except for Subpart Kb, the owner/operator of the site shall comply with the applicable provisions of this part if the Administrator determines that compliance with the provisions of this part is necessary for achieving the objectives of the regulation and the Administrator notifies the site in accordance with the provisions of the permit issued pursuant to 40 CFR 52.2454.

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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	All equipment listed in the following permits: 1221001, 1221003, 1221004, 1221005, 1221006, 1221007,
Emission Units	1221008, 1221009, 1221010, 1221011, and 1221012.
Permit Number	

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: 1) Contain particulate matter (PM) in excess of: (i) 0.30 pound per ton of feed (dry basis) to the kiln if construction, reconstruction, or modification of the kiln commences after August 17, 1971 but on or before June 16, 2008.
	(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:(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of clinker produced in tons of mass per hour. The system of measuring hourly clinker production
	must be maintained within ±5 percent accuracy. (ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of feed to the kiln in tons of mass per hour. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed-to-clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio should be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated;
	(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 $\S60.62(a)(1)(i)$ and (ii), the NO _X emissions limit in $\S60.62(a)(3)$, or the SO ₂ emissions limit in $\S60.62(a)(4)$ according to the requirements in paragraphs (h)(1) through (10) of this section.
	(1) The owner or operator must install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the NO _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.
	(2) The flow rate monitoring system must be designed to measure the exhaust gas flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust gas flow rate.
	(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate.
	(4) The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified in paragraph (h)(2) of this section.
	(5) The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.
	(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.
	(7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in Appendix B to part 60 of this chapter for a discussion of CD).
	(i) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).
	(ii) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.
	(8) You must perform an initial relative accuracy test of the flow rate monitoring system according to section 8.2 of Performance Specification 6 of Appendix B to part 60 of the chapter, with the exceptions noted in paragraphs (h)(8)(i) and (ii).
	(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.
	(ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.
	(9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (h)(8).
	(10) You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and

	span adjustments.
§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.
	(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.
	(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);
	(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
	(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
	(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.
	(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);
	(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
	(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).
	(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. (2) Use Method 9 and the procedures in § 60.11 to determine opacity. (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.
	(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
	(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA–454/R–98–015, September 1997.

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

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. (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.
- (3) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run.
- (4) All reports required by this 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:
	(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.
	(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.
	(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.
	(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);
	(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
	(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
	(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.
	(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);
	(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
	(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).
	(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. (2) Use Method 9 and the procedures in § 60.11 to determine opacity. (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.
	(10) Bag leak detection monitoring requirements. If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.
	(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
	(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA–454/R–98–015, September 1997.
	(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.
	(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
	(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
	(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.
	(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
	(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

Reporting

§60.64(d)	(1) Within 60 days after the date of completing each performance test (see § 60.8) as required by this subpart
300.04(u)	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/OAPOS/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. (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. (3) For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp signals corresponding to each PM compliance test run. (4) All reports required by this 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

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(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.
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:
(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;
(ii) Sealing off defective bags or filter media;
(iii) Replacing defective bags or filter media or otherwise repairing the control device;
(iv) Sealing off a defective fabric filter compartment;
(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
(vi) Shutting down the process producing the PM emissions.
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.
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.
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:
(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
(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
(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
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.
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);
	(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
	(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.
	(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);
	(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
	(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; (i) Installation of the BLDS;
	(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;
	(iii) Operation of the BLDS, including quality assurance procedures;
	(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;
	(v) How the BLDS output will be recorded and stored.

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FEDERAL REGULATIONS 40 CFR PART 60 SUBPART Y

Standards of Performance for Coal Preparation and Processing Plants

Subject	All equipment listed in the following permits: 1221006
Emission Units	
Permit Number	

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.
	(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).
	(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
	(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.
	(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.
	(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
	(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. (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 (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>i.e.</i> , the facility must achieve at least a 90 percent reduction of the potential combustion concentration and may not exceed a maximum emissions rate
	of 1.2 lb/MMBtu (520 ng/J)). (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. (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. (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.
	(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.
	(1) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coalcleaning equipment any gases that contain PM in excess of 0.040 g/dscm (0.017 gr/dscf); and
	(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coalcleaning 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.
	(1) The owner of operator must not cause to be discharged into the atmosphere from the pneumatic coalcleaning equipment any gases that contain PM in excess or 0.023 g/dscm (0.010 gr/dscf); and
	(2) The owner or operator must not cause to be discharged into the atmosphere from the pneumatic coalcleaning 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.
	(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.
	(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).
	(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. (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. (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). (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. (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. (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. (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. The Administrator or delegated authority may object to the fugitive coal dust emissions control plan as §60.254(c)(5) specified in paragraphs (c)(5)(i) and (c)(5)(ii) of this section. (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. (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. Where appropriate chemical dust suppression agents are selected by the owner or operator as a control §60.254(c)(6)

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.
	(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.
	(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.
	(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.
	(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.
	(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.
	(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 (<i>e.g.</i> , 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. (1) PM emissions, as determined by the most recent performance test, are less than or equal to the
	applicable limit,
	(2) The control device manufacturer's recommended maintenance procedures are followed, and
	(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.
	(1) PM emissions from the most recent performance test for each individual affected facility are 90 percent or less of the applicable PM standard;
	(2) The manufacturer's recommended maintenance procedures are followed for each control device; and
	(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.
	(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.
	(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.
	(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, <i>see</i> OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods. The monitoring plan approved by the Administrator or delegated authority shall be implemented by the owner or operator.
§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.
	(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.
	(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.
	(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.
	(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.
	(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). (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. (ii) Compliance with the applicable opacity limit is determined by averaging all 15-second opacity readings
§60.255(h)(2)	made during the duration of three separate truck dump events. 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:
	(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).
	(ii) For affected facilities that use wet scrubber emission control equipment:
	(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.
	(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.
	(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.
	(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.
	(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.
	(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.
	(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.
	(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).
	(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.
	(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.
	(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.
	(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.
	(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.
	(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.
	(i) Installation of the bag leak detection system;
	(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;
	(iii) Operation of the bag leak detection system, including quality assurance procedures;
	(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
	(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:
	(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;
	(ii) Sealing off defective bags or filter media;
	(iii) Replacing defective bags or filter media or otherwise repairing the control device;
	(iv) Sealing off a defective fabric filter compartment;
	(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
	(vi) Shutting down the process producing the PM emissions.
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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).
	(i) The duration of the Method 9 of appendix A-4 of this part performance test shall be 1 hour (ten 6-minute averages).
	(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.
	(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.
	(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.
	(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.
	(i) No more than three emissions points may be read concurrently.
	(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.
	(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.
	(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.
	(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.
	(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.

- (4) Method 4 of appendix A-4 of this part shall be used to determine the moisture content of the stack gas.
- (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:
 - (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.
 - (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.
 - (iii) Method 5B of appendix A of this part is to be used only after wet FGD systems.
 - (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).
 - (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.
 - (6) Method 6, 6A, or 6C of appendix A-4 of this part shall be used to determine the SO₂ concentration. A minimum of three valid test runs are needed to comprise an SO₂ performance test.
 - (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.
 - (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) onsite and make it available upon request. The logbook shall record the following:

- (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.
- (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.
- (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. (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. (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. (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. (i) Records of the bag leak detection system output; (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 (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. (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. (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. (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: (1) The owner or operator of an affected facility with a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the scrubber pressure loss, water supply flow rate, or pH of the wet scrubber liquid vary by more than 10 percent from the average determined during the most recent performance test. (2) The owner or operator of an affected facility with control equipment other than a wet scrubber shall submit semiannual reports to the Administrator or delegated authority of occurrences when the measurements of the reagent injection flow rate, as applicable, vary by more than 10 percent from the average determined during the most recent performance test. (3) All 6-minute average opacities that exceed the applicable standard. §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.

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FEDERAL REGULATIONS 40 CFR PART 60 SUBPART OOO

Standards of Performance for Nonmetallic Mineral Processing Plants

Subject	All equipment listed in the following permits: 1221019
Emission Units	
Permit Number	

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.
	(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).
	(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.
	(c) Facilities at the following plants are not subject to the provisions of this subpart:
	(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;
	(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
	(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.
	(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.
	(2) An owner or operator complying with paragraph (d)(1) of this section shall submit the information required in §60.676(a).
	(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.
	(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.
- (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.
- (c) [Reserved]
- (d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
- (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:
- (1) Fugitive emissions from the building openings (except for vents as defined in §60.671) must not exceed 7 percent opacity; and
- (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.
- (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.
- (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: (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. (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. The owner or operator of any affected facility for which construction, modification, or reconstruction §60.674(b) 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). (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: (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 (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. (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. Except as specified in paragraph (d) or (e) of this section, the owner or operator of any affected facility for §60.674(c) 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.

860 (54(1)	As an alternative to the periodic Method 22 (40 CER next 60 Appendix A 7) with a service in the
§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.
	(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.
	(ii) The bag leak detection system sensor must provide output of relative PM loadings. The owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (<i>e.g.</i> , using a strip chart recorder or a data logger).
	(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.
	(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.
	(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.
	(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.
	(vii) The owner or operator must install the bag leak detection sensor downstream of the fabric filter.
	(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.
	(i) Installation of the bag leak detection system;
	(ii) Initial and periodic adjustment of the bag leak detection system, including how the alarm set-point will be established;
	(iii) Operation of the bag leak detection system, including quality assurance procedures;
	(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
(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.
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:
(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;
(ii) Sealing off defective bags or filter media;
(iii) Replacing defective bags or filter media or otherwise repairing the control device;
(iv) Sealing off a defective fabric filter compartment;
(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
(vi) Shutting down the process producing the PM emissions.
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: (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. (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: (i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet). (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. (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. (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). (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. (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. (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. (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: (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: (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:		
	(i) No more than three emission points may be read concurrently.		
	(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.		
	(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 ₂ O (0.05 in. H ₂ O)] and referred to in EPA Method 5 of Appendix A-3 of this part. For these conditions, the owner or operator may determine the average gas flow rate produced by the power fans (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.		
	$v_e = \frac{Q_f}{A_e}$ (E q. 1)		
	Where:		
	V_e = average building vent velocity (feet per minute);		
	Q_t = average fan flow rate (cubic feet per minute); and		
	A_{ϵ} = 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.
	(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:
	(i) The rated capacity in megagrams or tons per hour of the existing facility being replaced and
	(ii) The rated capacity in tons per hour of the replacement equipment.
	(2) For a screening operation:
	(i) The total surface area of the top screen of the existing screening operation being replaced and
	(ii) The total surface area of the top screen of the replacement screening operation.
	(3) For a conveyor belt:
	(i) The width of the existing belt being replaced and
	(ii) The width of the replacement conveyor belt.
	(4) For a storage bin:
	(i) The rated capacity in megagrams or tons of the existing storage bin being replaced and
	(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.
	(i) Records of the bag leak detection system output;
	(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
	(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. (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.
	(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		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		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		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		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		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).

^aExceptions to the PM limit apply for individual enclosed storage bins and other equipment. See §60.672(d) through (f).

^bThe 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 Periodic inspections of water sprays according to \$60.674(b) and \$60.676(b); and
	A repeat performance test according to \$60.11 years from the previous performance test for full water sprays. Affected facilities controlled by inspected according to the requirements in \$60 repeat testing requirement.	agitive emissions from af water carryover from ups	fected facilities without tream water sprays that are

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

sinous or cy of once per
401 of Standard 985, or their

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 (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 (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.

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- (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
- (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
- (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.
- (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.
- (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
- (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
- (ii) At least 1 cubic meter (35 cubic feet) off facility components where the length or area could not be measured previously.
- (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.
- (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.
- (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

- (b)Each owner or operator of a demolition or renovation activity to which this section applies shall:
- (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.
- (2) Update notice, as necessary, including when the amount of asbestos affected changes by at least 20 percent.
 - (3) Postmark or deliver the notice as follows:
- (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.

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- (ii) At least 10 working days before the end of the calendar year preceding the year for which notice is being given for renovations described in paragraph (a)(4)(iii) of this section.
- (iii) As early as possible before, but not later than, the following working day if the operation is a demolition ordered according to paragraph (a)(3) of this section or, if the operation is a renovation described in paragraph (a)(4)(iv) of this section.
- (iv) For asbestos stripping or removal work in a demolition or renovation operation, described in paragraphs (a) (1) and (4) (except (a)(4)(iii) and (a)(4)(iv)) of this section, and for a demolition described in paragraph (a)(2) of this section, that will begin on a date other than the one contained in the original notice, notice of the new start date must be provided to the Administrator as follows:
- (A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,
- (I) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and
- (2) Provide the Administrator with a written notice of the new start date as soon as possible before, and no later than, the original start date. Delivery of the updated notice by the U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- (B) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin on a date earlier than the original start date,
- (1) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.
- (2) For demolitions covered by paragraph (a)(2) of this section, provide the Administrator written notice of a new start date at least 10 working days before commencement of demolition. Delivery of updated notice by U.S. Postal Service, commercial delivery service, or hand delivery is acceptable.
- (C) In no event shall an operation covered by this paragraph begin on a date other than the date contained in the written notice of the new start date.
 - (4) Include the following in the notice:
 - (i) An indication of whether the notice is the original or a revised notification.
- (ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.
 - (iii) Type of operation: demolition or renovation.
- (iv) Description of the facility or affected part of the facility including the size (square meters [square feet] and number of floors), age, and present and prior use of the facility.
- (v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.

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- (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.
- (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.
- (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.
 - (ix) Scheduled starting and completion dates of demolition or renovation.
- (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.
- (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.
- (xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.
- (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.
- (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.
- (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.
- (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.
 - (xvii) Name, address, and telephone number of the waste transporter.
- (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.

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

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- (ii) In renovation operations where wetting would result in equipment damage or a safety hazard, and the methods allowed in paragraph (c)(3)(i) of this section cannot be used, another method may be used after obtaining written approval from the Administrator based upon a determination that it is equivalent to wetting in controlling emissions or to the methods allowed in paragraph (c)(3)(i) of this section.
- (iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.
- (4) After a facility component covered with, coated with, or containing RACM has been taken out of the facility as a unit or in sections pursuant to paragraph (c)(2) of this section, it shall be stripped or contained in leak-tight wrapping, except as described in paragraph (c)(5) of this section. If stripped, either:
 - (i) Adequately wet the RACM during stripping; or
- (ii) Use a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.
- (5) For large facility components such as reactor vessels, large tanks, and steam generators, but not beams (which must be handled in accordance with paragraphs (c)(2), (3), and (4) of this section), the RACM is not required to be stripped if the following requirements are met:
- (i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.
 - (ii) The component is encased in a leak-tight wrapping.
- (iii) The leak-tight wrapping is labeled according to §61.149(d)(1)(i), (ii), and (iii) during all loading and unloading operations and during storage.
 - (6) For all RACM, including material that has been removed or stripped:
- (i) Adequately wet the material and ensure that it remains wet until collected and contained or treated in preparation for disposal in accordance with §61.150; and
- (ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.
- (iii) Transport the material to the ground via leak-tight chutes or containers if it has been removed or stripped more than 50 feet above ground level and was not removed as units or in sections.
- (iv) RACM contained in leak-tight wrapping that has been removed in accordance with paragraphs (c)(4) and (c)(3)(i)(B)(3) of this section need not be wetted.
 - (7) When the temperature at the point of wetting is below $0 \,^{\circ}\text{C}$ (32 $^{\circ}\text{F}$):
- (i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.
- (ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.

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- (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.
- (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.
- (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.
- (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.

<u>Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations</u>

§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:

- (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.
 - (1) Adequately wet asbestos-containing waste material as follows:
- (i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and
- (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
- (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

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- (iv) Label the containers or wrapped materials specified in paragraph (a)(1)(iii) of this section using warning labels specified by Occupational Safety and Health Standards of the Department of Labor, Occupational Safety and Health Administration (OSHA) under 29 CFR 1910.1001(j)(4) or 1926.1101(k)(8). The labels shall be printed in letters of sufficient size and contrast so as to be readily visible and legible.
- (v) For asbestos-containing waste material to be transported off the facility site, label containers or wrapped materials with the name of the waste generator and the location at which the waste was generated.
 - (2) Process asbestos-containing waste material into nonfriable forms as follows:
 - (i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;
- (ii) Discharge no visible emissions to the outside air from collection and processing operations, including incineration, or use the method specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air.
- (3) For facilities demolished where the RACM is not removed prior to demolition according to §§61.145(c)(1) (i), (ii), (iii), and (iv) or for facilities demolished according to §61.145(c)(9), adequately wet asbestos-containing waste material at all times after demolition and keep wet during handling and loading for transport to a disposal site. Asbestos-containing waste materials covered by this paragraph do not have to be sealed in leak-tight containers or wrapping but may be transported and disposed of in bulk.
- (4) Use an alternative emission control and waste treatment method that has received prior approval by the Administrator according to the procedure described in §61.149(c)(2).
- (5) As applied to demolition and renovation, the requirements of paragraph (a) of this section do not apply to Category I nonfriable ACM waste and Category II nonfriable ACM waste that did not become crumbled, pulverized, or reduced to powder.
- (b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:
 - (1) A waste disposal site operated in accordance with the provisions of §61.154, or
- (2) An EPA-approved site that converts RACM and asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of §61.155.
- (3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.
- (c) Mark vehicles used to transport asbestos-containing waste material during the loading and unloading of waste so that the signs are visible. The markings must conform to the requirements of §§61.149(d)(1) (i), (ii), and (iii).
 - (d) For all asbestos-containing waste material transported off the facility site:
- (1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:
 - (i) The name, address, and telephone number of the waste generator.

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- (ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.
 - (iii) The approximate quantity in cubic meters (cubic yards).
 - (iv) The name and telephone number of the disposal site operator.
 - (v) The name and physical site location of the disposal site.
 - (vi) The date transported.
 - (vii) The name, address, and telephone number of the transporter(s).
- (viii) A certification that the contents of this consignment are fully and accurately described by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.
- (2) Provide a copy of the waste shipment record, described in paragraph (d)(1) of this section, to the disposal site owners or operators at the same time as the asbestos-containing waste material is delivered to the disposal site.
- (3) For waste shipments where a copy of the waste shipment record, signed by the owner or operator of the designated disposal site, is not received by the waste generator within 35 days of the date the waste was accepted by the initial transporter, contact the transporter and/or the owner or operator of the designated disposal site to determine the status of the waste shipment.
- (4) Report in writing to the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program for the waste generator if a copy of the waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the waste generator within 45 days of the date the waste was accepted by the initial transporter. Include in the report the following information:
 - (i) A copy of the waste shipment record for which a confirmation of delivery was not received, and
- (ii) A cover letter signed by the waste generator explaining the efforts taken to locate the asbestos waste shipment and the results of those efforts.
- (5) Retain a copy of all waste shipment records, including a copy of the waste shipment record signed by the owner or operator of the designated waste disposal site, for at least 2 years.
- (e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.

Air Cleaning

§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:
- (1) Use fabric filter collection devices, except as noted in paragraph (b) of this section, doing all of the following:
- (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
- (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
 - (iii) Avoiding the use of synthetic fabrics that contain fill yarn other than that which is spun.
- (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.
- (3) For fabric filter collection devices installed after January 10, 1989, provide for easy inspection for faulty bags.
 - (b) There are the following exceptions to paragraph (a)(1):
- (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).
 - (2) Use a HEPA filter that is certified to be at least 99.97 percent efficient for 0.3 micron particles.
- (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.

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- (1) A description of the emission control equipment used for each process; and
- (i) If the fabric device uses a woven fabric, the airflow permeability in m³/min/m² and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and
- (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 $m^3/min/m^2$.
 - (2) If a fabric filter device is used to control emissions,
- (i) The airflow permeability in m³/min/m² (ft³/min/ft²) 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
- (ii) If the fabric filter device uses a felted fabric, the density in g/m^2 (oz/yd²), the minimum thickness in millimeters (inches), and the airflow permeability in $m^3/min/m^2$ (ft³/min/ft²).
 - (3) If a HEPA filter is used to control emissions, the certified efficiency.
 - (4) For sources subject to §§61.149 and 61.150:
 - (i) A brief description of each process that generates asbestos-containing waste material; and
- (ii) The average volume of asbestos-containing waste material disposed of, measured in m³/day (yd³/day); and
 - (iii) The emission control methods used in all stages of waste disposal; and
- (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.
 - (5) For sources subject to §§61.151 and 61.154:
 - (i) A brief description of the site; and
 - (ii) The method or methods used to comply with the standard, or alternative procedures to be used.
- (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.

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FEDERAL REGULATIONS 40 CFR 63 SUBPART A General Provisions

Applicable provisions of 40 CFR 63 Subpart A shall apply.

supersede definitions in §63.2.

[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

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

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

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§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. (3)-(4) [Reserved]
	(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.
§§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.

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FEDERAL REGULATIONS NESHAPS SUBPART LLL

National Emission Standards for Hazardous Air Pollutants Portland Cement Manufacturing Industry

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:
	(1) June 14, 2002, for sources that commenced construction before or on March 24, 1998.
	(c) The compliance date for existing sources for all the requirements that became effective on February 12, 2013, except for the open clinker pile requirements will be September 9, 2015.

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:				
	(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;				
	(2) Each clinker cooler at any portland cement plant;				
	(3) Each raw mill at any portland cement plant;				
	(4) Each finish mill at any portland cement plant;				
	(5) Each raw material dryer at any portland cement plant;				
	(6) Each raw material, clinker, or finished product storage bin at any portland cement plant;				
	(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;				
	(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)	Onsite sources that are subject to standards for nonmetallic mineral processing plants in subpart OOO, part 60 of this chapter are not subject to this subpart. Crushers are not covered by this subpart regardless of their location.				

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§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. 63.1(a)(1)-(4), (6)-(8), (10)-(14); 63.1(b)(2)-(3); 63.1(c)(1), (2), (4)-(5); 63.1(e); 63.2(e); 63.3(a)-(c); 63.4(a)(1)-(3), (5); 63.4(b)-(c); 63.5(a)(1)-(2); 63.5(b)(1), (3)-(6); 63.5(d)(1)-(4); 63.5(e); 63.5(f)(1)-(2); 63.6(a); 63.6(b)(1)-(5), (7); 63.6(c)(1)-(2), (5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(h)(2), (4)-(5)(i), (6)-(7); 63.6(i)(1)-(14), (16); 63.6(j); 63.7(a)(1)-(3); 63.7(b); 63.7(c); 63.7(d); 63.7(e)(2)-(4); 63.7(f); 63.7(g); 63.8(h); 63.8(a)(1); 63.8(b)(1)-(3); 63.7(c); 63.7(d); 63.8(e); 63.8(f); 63.8(g); 63.9(a); 63.9(b); 63.9(c); 63.9(d); 63.9(e); 63.9(f); 63.9(g); 63.9(h)(1)-(3), (5)-(6); 63.9(i); 63.9(j); 63.10(a); 63.10(b)(1), (2)(iii), (2)(vi)-(ix); 63.10(c)(1), (5)-(8), (10)-(15); 63.10(d)(1)-(4); 63.10(e)(1)-(3); 63.12(a)-(c) 63.13(a)-(c) 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.				

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$Standards\ for\ kilns,\ clinker\ coolers,\ raw\ material\ dryers,\ and\ open\ clinker\ storage\ piles.\ \S 63.1343$

§63.1343(b)(1)	sho	wn in table 1 below	·.		·	The emission limits for	
§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 D/F—0.2 ¹ Mercury—55 THC—24 ^{2,3}	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
	3.	An existing kiln	Startup and shutdown	At an area source	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 ⁻						
	 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). Measured as propane. 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: $PM_{alt} = (0.0060 \times 1.65) (Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000) (Eq. 1)$						
	Where: PMalt = 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. Qk = The exhaust flow of the kiln (dscf/ton feed). Qc = The exhaust flow of the clinker cooler (dscf/ton feed). Qab = The exhaust flow of the alkali bypass (dscf/ton feed). Qcm = The exhaust flow of the coal mill (dscf/ton feed). 7000 = The conversion factor for grains (gr) per lb.						
§63.1343(c)						operate in accordance enance plan (see § 63.1	

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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.

- (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.
- (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.
- (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§ 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:

- (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.
- (2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main inline 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.
- (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: (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; (2) Corrective actions to be taken when required by paragraph §63.1350(f)(3); (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.

- (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).
- (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.
- (3) D/F compliance.
 - (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.
 - (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.
 - (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). (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 \S 63.1349(b)(3) that meets the requirements of \S 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 \S 63.1350(p).

(4)

- (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. (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).
- (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.
- (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. (v) The time weighted average THC concentration measured during the initial performance test specified
- (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.
- (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.
 - (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.
 - (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.
- (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:
 - (i) Performing required emissions monitoring and testing on the commingled coal mill and kiln exhaust, or (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.

(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).

- (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.
- (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
- (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).
- (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).
- (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.
 - (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).
 - (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).
- (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).
- (5) Activated Carbon Injection Compliance.
 - (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).
 - (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).
- (6) THC Compliance.
 - (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).
 - (ii) THC must be measured either upstream of the coal mill or in the coal mill stack.
- (7) Mercury Compliance.
 - (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).
- (ii) Mercury must be measured either upstream of the coal mill or in the coal mill stack.
- (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).
- (2) In preparation for and while conducting a performance test required in $\S63.1349(b)$, 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.
- (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.
- (ii) The performance test results must be documented in a test report according to §63.1349(a).
- (iii) A test plan must be made available to the Administrator prior to performance testing, if requested.
- (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)

- (a) You must document performance test results in complete test reports that contain the information required by paragraphs (a)(1) through (10) of this section, as well as all other relevant information. As described in § 63.7(c)(2)(i), you must make available to the Administrator prior to testing, if requested, the site-specific test plan to be followed during performance testing. For purposes of determining exhaust gas flow rate to the atmosphere from an alkali bypass stack or a coal mill stack, you must either install, operate, calibrate and maintain an instrument for continuously measuring and recording the exhaust gas flow rate according to the requirements in paragraphs § 63.1350(n)(1) through (10) of this subpart or use the maximum design exhaust gas flow rate. For purposes of determining the combined emissions from kilns equipped with an alkali bypass or that exhaust kiln gases to a coal mill that exhausts through a separate stack, instead of installing a CEMS on the alkali bypass stack or coal mill stack, you may use the results of the initial and subsequent performance test to demonstrate compliance with the relevant emissions limit.
- (1) A brief description of the process and the air pollution control system;

- (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
- (4) Test results;
- (5) Quality assurance procedures and results;
- (6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
- (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for monitoring; and
- (10) Any other information required by the performance test method.

§63.1349(b)

- (1) *PM emissions tests*. The owner or operator of a kiln and clinker cooler subject to limitations on PM emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You must also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS).
 - (i) For your PM CPMS, you will establish a site-specific operating limit. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp or digital equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You will use the PM CPMS to demonstrate continuous compliance with your operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.
 - (A) Your PM CPMS must provide a 4-20 milliamp or digital signal output and the establishment of its relationship to manual reference method measurements must be determined in units of milliamps or the monitors digital equivalent.
 - (B) Your PM CPMS operating range must be capable of reading PM concentrations from zero to a level equivalent to three times your allowable emission limit. If your PM CPMS is an auto-ranging instrument capable of multiple scales, the primary range of the instrument must be capable of reading PM concentration from zero to a level equivalent to three times your allowable emission limit.
 - (C) During the initial performance test or any such subsequent performance test that demonstrates compliance with the PM limit, record and average all milliamp or digital output values from the PM CPMS for the periods corresponding to the compliance test runs (*e.g.*, average all your PM CPMS output values for three corresponding Method 5I test runs).
 - (ii) Determine your operating limit as specified in paragraphs (b)(1)(iii) through (iv) of this section. If your PM performance test demonstrates your PM emission levels to be below 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test, the milliamp or digital equivalent of zero output from your PM CPMS, and the average PM result of your compliance test to establish your operating limit. If your PM compliance test demonstrates your PM emission levels to be at or above 75 percent of your emission limit you will use the average PM CPMS value recorded during the PM compliance test to establish your operating limit. You must verify an existing or establish a new operating limit after each repeated performance test. You must repeat the performance test at least annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test.
 - (iii) If the average of your three Method 5 or 5I compliance test runs is below 75 percent of your PM emission limit, you must calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the procedures in (b)(1)(iii)(A) through (D) of this section.

- (A) Determine your PM CPMS instrument zero output with one of the following procedures:
 - (1) Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench.
 - (2) Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air.
 - (3) The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low

PM concentrations (*e.g.*, when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept.

- (4) If none of the steps in paragraphs (b)(1)(iii)(A)(1) through (3) of this section are possible, you must use a zero output value provided by the manufacturer.
- (B) Determine your PM CPMS instrument average in milliamps or digital equivalent, and the average of your corresponding three PM compliance test runs, using equation 3.

$$\overline{x} = \frac{1}{n} \sum_{i=1}^{n} X_1, \overline{y} = \frac{1}{n} \sum_{i=1}^{n} Y_1(\text{Eq. 3})$$

Where

 X^1 = The PM CPMS data points for the three runs constituting the performance test.

 Y^1 = The PM concentration value for the three runs constituting the performance test.

n =The number of data points.

(C) With your instrument zero expressed in milliamps or a digital value, your three run average PM CPMS milliamp or digital signal value, and your three run PM compliance test average, determine a relationship of lb/ton-clinker per milliamp or digital signal value with Equation 4.

$$R = \frac{Y_1}{(X_1 - z)} (\text{Eq. 4})$$

Where:

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

 Y^1 = The three run average lb/ton-clinker PM concentration.

 X^1 = The three run average milliamp or digital equivalent output from your PM CPMS.

z =The milliamp or digital equivalent of your instrument zero determined from (b)(1)(iii)(A).

(D) Determine your source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp or digital signal value from Equation 4 in Equation 5, below. This sets your operating limit at the PM CPMS output value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R} (\text{Eq. 5})$$

Where

 O^{\dagger} = The operating limit for your PM CPMS on a 30-day rolling average, in milliamps or the digital equivalent.

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

 $z = Your \ instrument \ zero \ in \ milliamps, \ or \ digital \ equivalent, \ determined \ from \ (b)(1)(iii)(A).$

R = The relative lb/ton-clinker per milliamp, or digital equivalent, for your PM CPMS, from Equation 4.

(iv) If the average of your three PM compliance test runs is at or above 75 percent of your PM emission limit you must determine your operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using Equation 6.

$$O_k = \frac{1}{n} \sum_{i=1}^n X_i(\text{Eq. 6})$$

Where:

 X^1 = The PM CPMS data points for all runs i.

n = The number of data points.

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

(vii) 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 or digital equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run.

(viii) When there is an alkali bypass and/or an inline coal mill with a separate stack associated with a kiln, the main exhaust and alkali bypass and/or inline coal mill must be tested simultaneously and the combined

emission rate of PM from the kiln and alkali bypass and/or inline coal mill must be computed for each run using Equation 8 of this section.

$$E_{Cm} = \frac{E_K + E_B + E_C}{P} (\text{Eq. 8})$$
 Where:
$$E^{Cm} = \text{Combined hourly emission rate of PM from the kiln and bypass stack and/or inline coal mill, lb/ton of kiln clinker production.}$$

$$E^K = \text{Hourly emissions from the alkali bypass stack, lb.}$$

$$E^B = \text{Hourly PM emissions from the alkali bypass stack, lb.}$$

$$E^C = \text{Hourly PM emissions from the inline coal mill stack, lb.}$$

$$P = \text{Hourly clinker production, tons.}$$

- (ix) The owner or operator of a kiln with an in-line raw mill and subject to limitations on PM emissions shall demonstrate initial compliance by conducting separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating, and calculate the time weighted average emissions. The operating limit will then be determined using 63.1349(b)(1)(i) of this section.
- (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) and (ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.
 - (i) There are no individual readings greater than 10 percent opacity;
 - (ii) There are no more than three readings of 10 percent for the first 1-hour period.
- (3) *D/F Emissions Tests*. If you are subject to limitations on D/F emissions under this subpart, you must conduct a performance test using Method 23 of appendix A-7 to part 60 of this chapter. If your kiln or in-line kiln/raw mill is equipped with an alkali bypass, you must conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass. You may conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is operating or not operating.
 - (i) Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).
 - (ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and, where applicable, the temperature at the inlet to the alkali bypass PMCD must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.
 - (iii) Average temperatures must be calculated for each run of the performance test.
 - (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with § 63.1346(b).

 (v)
 - (A) If sorbent injection is used for D/F control, you must record the rate of sorbent injection to the kiln exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, continuously during the period of the Method 23 test in accordance with the conditions in § 63.1350(m)(9), and include the continuous injection rate record(s) in the performance test report.

 Determine the sorbent injection rate parameters in accordance with paragraph (b)(3)(vi) of this section.
 - (B) Include the brand and type of sorbent used during the performance test in the performance test report. (C) 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, 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, determine, record, and maintain a record of the accuracy of the carrier gas pressure drop monitoring system according to the procedures in § 63.1350(m)(6).
 - (vi) Calculate the run average sorbent injection rate for each run and determine and include the average of the run average injection rates in the performance test report and determine the applicable injection rate limit in accordance with $\S 63.1346(c)(1)$.
- (4) THC emissions test.
 - (i) If you are subject to limitations on THC emissions, you must operate a CEMS in accordance with

the requirements in § 63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 to 60 ppmvw and the reference method (RM) is Method 25A of appendix A to part 60 of this chapter.

- (ii) Use the THC CEMS to conduct the initial compliance test for the first 30 kiln operating days of kiln operation after the compliance date of the rule. See § 63.1348(a).
- (iii) If kiln gases are diverted through an alkali bypass or to a coal mill and exhausted through a separate stack, you must calculate a kiln-specific THC limit using Equation 9:

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Cks = \frac{(\text{MACT Limit} \times (\text{Qab+Qcm+Qks})) - (\text{Qab} \times \text{Cab}) - (\text{Qcm} \times \text{Ccm})}{Qks} \big( \text{Eq. 9} \big) Where: \text{Cks} = \text{Kiln stack concentration (ppmvd)}. \text{Qab} = \text{Alkali bypass flow rate (volume/hr)}. \text{Cab} = \text{Alkali bypass concentration (ppmvd)}. \text{Qcm} = \text{Coal mill flow rate (volume/hr)}. \text{Ccm} = \text{Coal mill concentration (ppmvd)}. \text{Qks} = \text{Kiln stack flow rate (volume/hr)}.
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- (iv) THC must be measured either upstream of the coal mill or the coal mill stack.
- (v) Instead of conducting the performance test specified in paragraph (b)(4)of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraph (b)(7) of this section.
- (5) *Mercury Emissions Tests*. If you are subject to limitations on mercury emissions, you must operate a mercury CEMS or a sorbent trap monitoring system in accordance with the requirements of § 63.1350(k). The initial compliance test must be based on the first 30 kiln operating days in which the affected source operates using a mercury CEMS or a sorbent trap monitoring system after the compliance date of the rule. See § 63.1348(a).
 - (i) If you are using a mercury CEMS or a sorbent trap monitoring system, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in § 63.1350(k)(5).
 - (ii) Calculate the emission rate using Equation 10 of this section:

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E_{30D} = k \frac{\sum_{i=1}^{n} C_{i} Q_{i}}{P} (\text{Eq. 10})
Where:
E^{30D} = 30\text{-day rolling emission rate of mercury, lb/MM tons clinker.}
C^{i} = \text{Concentration of mercury for operating hour i, } \mu g/\text{scm.}
Q^{i} = \text{Volumetric flow rate of effluent gas for operating hour i, } \text{where } C^{i} \text{ and } Q^{i} \text{ are on the same basis (either wet or dry), } \text{scm/hr.}
k = \text{Conversion factor, 1 lb/454,000,000 } \mu g.
n = \text{Number of kiln operating hours in the previous 30 kiln operating day period where both C and Qi qualified data are available.}
P = \text{Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.}
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- (7) *Total Organic HAP Emissions Tests.* Instead of conducting the performance test specified in paragraph (b)(4) of this section, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(7)(i) through (v) of this section.
 - (i) Use Method 320 of appendix A to this part, Method 18 of Appendix A of part 60, ASTM D6348-03 or a combination to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with § 63.7(e). Each run must be conducted for at least 1 hour. (ii) At the same time that you are conducting the performance test for total organic HAP, you must also determine a site-specific THC emissions limit by operating a THC CEMS in accordance with the requirements of § 63.1350(j). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the recorded output) during the 3-hour test must be
 - the requirements of § 63.1350(j). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the recorded output) during the 3-hour test must be calculated. You must establish your THC operating limit and determine compliance with it according to paragraphs (b)(7)(vii) and (viii) of this section. It is permissible to extend the testing time of the organic HAP performance test if you believe extended testing is required to adequately capture organic HAP and/or THC variability over time.
 - (iii) If your source has an in-line kiln/raw mill you must use the fraction of time the raw mill is on and the fraction of time that the raw mill is off and calculate this limit as a weighted average of the THC levels measured during three raw mill on and three raw mill off tests.
 - (iv) If your organic HAP emissions are below 75 percent of the organic HAP standard and you determine your operating limit with paragraph (b)(7)(vii) of this section your THC CEMS must be calibrated and operated on a measurement scale no greater than 180 ppmvw, as carbon, or 60 ppmvw as

propane.

- (v) If your kiln has an inline coal mill and/or an alkali bypass with separate stacks, you are required to measure and account for oHAP emissions from their separate stacks. You are required to measure oHAP at the coal mill inlet or outlet and you must also measure oHAP at the alkali bypass outlet. You must then calculate a flow weighted average oHAP concentration for all emission sources including the inline coal mill and the alkali bypass.
- (vi) Your THC CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times your highest THC emissions average determined during your performance test, including mill on or mill off operation.

Note:

This may require the use of a dual range instrument to meet this requirement and paragraph (b)(7)(iv) of this section.

(vii) Determine your operating limit as specified in paragraphs (b)(7)(viii) and (ix) of this section. If your organic HAP performance test demonstrates your average organic HAP emission levels are below 75 percent of your emission limit (9 ppmv) you will use the average THC value recorded during the organic HAP performance test, and the average total organic HAP result of your performance test to establish your operating limit. If your organic HAP compliance test results demonstrate that your average organic HAP emission levels are at or above 75 percent of your emission limit, your operating limit is established as the average THC value recorded during the organic HAP performance test. You must establish a new operating limit after each performance test. You must repeat the performance test no later than 30 months following your last performance test and reassess and adjust the site-specific operating limit in accordance with the results of the performance test. (viii) If the average organic HAP results for your three Method 18 and/or Method 320 performance test runs are below 75 percent of your organic HAP emission limit, you must calculate an operating limit by establishing a relationship of THC CEMS signal to the organic HAP concentration using the average THC CEMS value corresponding to the three organic HAP compliance test runs and the average organic HAP total concentration from the Method 18 and/or Method 320 performance test runs with the procedures in (b)(7)(viii)(A) and (B) of this section.

(A) Determine the THC CEMS average value in ppmvw, and the average of your corresponding three total organic HAP compliance test runs, using Equation 12.

LII note: we have temporarily removed a non-accessible image, originally published by the government at er07oc20.012

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Where:

x
= The average THC CEMS value in ppmvw, as propane.

X<sup>i</sup> = The THC CEMS data points in ppmvw, as propane, for all three test runs.

y
= The average organic HAP value in ppmvd, corrected to 7 percent oxygen.

Y<sup>i</sup> = The organic HAP concentrations in ppmvd, corrected to 7 percent oxygen, for all three test runs.

n = The number of data points.
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(B) You must use your 3-run average THC CEMS value and your 3-run average organic HAP concentration from your Method 18 and/or Method 320 compliance tests to determine the operating limit. Use equation 13 to determine your operating limit in units of ppmvw THC, as propane. LII note: we have temporarily removed a non-accessible image, originally published by the government at er07oc20.013

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Where:

T<sup>I</sup> = The 30-day operating limit for your THC CEMS, ppmvw, as propane.

y

= The average organic HAP concentration from Eq. 12, ppmvd, corrected to 7 percent oxygen.

x

= The average THC CEMS concentration from Eq. 12, ppmvw, as propane.

9 = 75 percent of the organic HAP emissions limit (12 ppmvd, corrected to 7 percent oxygen)
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(ix) If the average of your three organic HAP performance test runs is at or above 75 percent of your organic HAP emission limit, you must determine your operating limit using Equation 14 by averaging the THC CEMS output values corresponding to your three organic HAP performance test runs that demonstrate compliance with the emission limit. If your new THC CEMS value is below your current operating limit, you may opt to

retain your current operating limit, but you must still submit all performance test and THC CEMS data according to the reporting requirements in paragraph (d)(1) of this section.

 $T_h \frac{1}{n} \sum_{i=1}^n X_1(\text{Eq. }14)$

Where:

 X^1 = The THC CEMS data points for all runs i.

n =The number of data points.

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

- (x) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with Equation 15.
- (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).

$$R = (y * t) + (x * (1 - t))$$
 (Eq. 15)

Where:

R = Operating limit as THC, ppmvw.

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

t = Percentage of operating time with mill on.

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

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

(xi) To determine continuous compliance with the THC operating limit, you must record the THC CEMS output data for all periods when the process is operating and the THC CEMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the THC CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 16 to determine the 30 kiln operating day average.

30kiln operating day =
$$\frac{\sum_{i=1}^{n} \text{Hpv}_{i}}{n}$$
 (Eq. 16)

Where:

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

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

- (xii) Use EPA Method 18 or Method 320 of appendix A to part 60 of this chapter to determine organic HAP emissions. For each performance test, conduct at least three separate runs under the conditions that exist when the affected source is operating at the level reasonably expected to occur. If your source has an in-line kiln/raw mill you must conduct three separate test runs with the raw mill on, and three separate runs under the conditions that exist when the affected source is operating at the level reasonably expected to occur with the mill off. Conduct each Method 18 test run to collect a minimum target sample equivalent to three times the method detection limit. Calculate the average of the results from three runs to determine compliance.
- (xiii) If the THC level exceeds by 10 percent or more your site-specific THC emissions limit, you must (A) As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the THC CEMS measurements to within the established value; and
- (B) Within 90 days of the exceedance or at the time of the 30 month compliance test, whichever comes first, conduct another performance test to determine compliance with the organic HAP limit and to verify or reestablish your site-specific THC emissions limit.

§63.1349(c)

Performance test frequency. Except as provided in § 63.1348(b), performance tests are required at regular intervals for affected sources that are subject to a dioxin, organic HAP or HCl emissions limit. Performance tests required every 30 months must be completed no more than 31 calendar months after the previous performance test except where that specific pollutant is monitored using CEMS; performance tests required every 12 months must be completed no more than 13 calendar months after the previous performance test.

§63.1349(e)

Conditions of performance tests. Conduct performance tests 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

(1) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a §63.1350(a) continuous basis by meeting the requirements of this section. (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. (4) Any instance where the owner or operator fails to comply with the continuous monitoring requirements of this section is a violation. (b) PM monitoring requirements. (1)(i) PM CPMS. You will use a PM CPMS to establish a site-specific §63.1350(b) 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. (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. (iii) For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, you must: (A) Within 48 hours of the exceedance, visually inspect the APCD; (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 (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. (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 SO₂emissions (lb/ton of clinker), you must: (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. (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. (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). (3) Record the daily clinker production rates and kiln feed rates; and (4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section. Opacity monitoring requirements. If you are subject to a limitation on opacity under §63.1345, you must §63.1350(f) 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. (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. (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. (iii) If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. (iv) If visible emissions are observed during any Method 22 performance test, of appendix A-7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions. (v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. (vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A-7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section. (vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes. (2)(i) For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes. (ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

- (iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (a)(5)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (a)(5)(i) of the section, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes.
- (3) Corrective actions. If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.
- (4) The requirements under paragraph (f)(2) of this section to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).
- (i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.
- (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.

- (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.
- (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).
- (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.
- (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.
- (3) The required minimum data collection frequency must be one minute.
- (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.)
- (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.

- (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.
- (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.

- (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 μ g/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.
- (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.
- (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 μ g/m 3 of total mercury. The requirements of PS 12A, shall be followed for this second span with the exception that a RATA with the mill off is not required.
- (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.

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

- (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 $\leq 1~\mu g/dscm$ and $>0.5~\mu g/dscm$, $\leq 20\%$ 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 \leq 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.
- (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.
- (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)

- (iii) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.
- (iv) Check pressure tap pluggage daily.
- (v) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
- (vi) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.
- (7) Specific pH monitoring requirements. If you have an operating limit that requires the use of a pH measurement device, you must meet the requirements in paragraphs (m)(7)(i) through (iii) of this section.
- (i) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.
- (ii) Ensure the sample is properly mixed and representative of the fluid to be measured.
- (iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.
- (9) Mass flow rate (for sorbent injection) monitoring requirements. If you have an operating limit that requires the use of equipment to monitor sorbent injection rate (e.g., weigh belt, weigh hopper, or hopper flow measurement device), you must meet the requirements in paragraphs (m)(9)(i) through (iii) of this section.
- (i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.
- (ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.
- (iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.
- (10) Bag leak detection monitoring requirements. If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.
- (i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.
- (ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.
- (iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.
- (iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.
- (v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.
- (vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.
- (vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.
- (viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.

- (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:
- (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:
- (ii) Sealing off defective bags or filter media;
- (iii) Replacing defective bags or filter media or otherwise repairing the control device;
- (iv) Sealing off a defective fabric filter compartment;
- (v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or
- (vi) Shutting down the process producing the PM emissions.

§63.1350(n)

Continuous emissions 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.

- (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.
- (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.
- (3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.
- (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.
- (5) The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system.
- (6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.
- (7) The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (*see* sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of this chapter for a discussion of CD).
- (i) Conduct the CD tests at two reference signal levels, zero (e.g., 0 to 20 percent of span) and upscale (e.g., 50 to 70 percent of span).
- (ii) The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span.
- (8) You must perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of appendix B to Part 60 of the chapter with the exceptions in paragraphs (n)(8)(i) and (n)(8)(ii) of this section.
- (i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.

- (ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.
- (9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (n)(8).
- (10) You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).

§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.
- (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.
- (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:
- (i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
- (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
- (iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
- (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:
- (i) Notice of the information and findings upon which the intended disapproval is based; and
- (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.
- (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.
- (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.
	(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);
	(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and
	(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).
	(2) In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.
	(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);
	(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and
	(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).
	(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.
	(5) <i>BLDS monitoring plan</i> . Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;
	 (i) Installation of the BLDS; (ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established; (iii) Operation of the BLDS, including quality assurance procedures; (iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list; (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:
	(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).
	(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §\$63.6(h)(5) and 63.9(f).
	(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.
	(5) Notification of compliance status, as required by §63.9(h).
	(6) Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits,
	notify the appropriate permitting agency of the planned performance tests. The notification requirements of §§
	63.7(b) and 63.9(e) do not apply to retesting required for exceedances under this subpart.

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:
	(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.
	(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.
	(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.
	(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. (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).
- (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.
- (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:
 - (i) All exceedances of maximum control device inlet gas temperature limits specified in § 63.1346(a) and (b);
 - (ii) Notification of any failure to calibrate thermocouples and other temperature sensors as required under § 63.1350(g)(1)(iii) of this subpart; and
 - (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).
 - (iv) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under § 63.1347(a)(3).
 - (v) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with § 63.1347(a).
 - (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.
 - (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.
- (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. (11)
 - (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.
 - (A) The initial performance test data as recorded under § 63.1349(a).
 - (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.
 - (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.
 - (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.
(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).
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 (1) All documentation supporting initial notifications and notifications of compliance status under §63.9;
	(2) All records of applicability determination, including supporting analyses; and (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>i.e.</i>, process equipment) or the air pollution control and monitoring equipment. (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

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or Tribal agency.

(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,

- (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.
- (c) The authorities that cannot be delegated to State, local, or Tribal agencies are as specified in paragraphs (c)(1) through (4) of this section.
 - (1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.
- (2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f), as defined in §63.90, and as required in this subpart.
- (3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.
- (4) Approval of major alternatives to recordkeeping and reporting under 63.10(f), as defined in 63.90, and as required in this subpart.

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FEDERAL REGULATIONS NESHAP SUBPART ZZZZ

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

Subject	All equipment listed in the following permits: 1221015, 1221016, and 1221017.
Emission Units	
Permit Number	
§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.
	(i) There is no time limit on the use of emergency stationary RICE in emergency situations.
	(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.
	(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.	
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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. $\S 63.6611$

§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.
	(1) The test must have been conducted using the same methods specified in this subpart, and these methods must have been followed correctly.
	(2) The test must not be older than 2 years.
	(3) The test must be reviewed and accepted by the Administrator.
	(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:
	$\frac{C_i - C_o}{C_i} \times 100 = R \qquad \text{(Eq. 1)}$ Where:
	C_i = concentration of CO or formaldehyde at the control device inlet, C_o = concentration of CO or formaldehyde at the control device outlet, and R = percent reduction of CO or formaldehyde emissions.
	(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.
	(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:
	$F_o = \frac{0.209 \ F_d}{F_c}$ (Eq. 2) Where:
	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.
	0.209 = Fraction of air that is oxygen, percent/100.
	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).
	(ii) Calculate the CO ₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:
	$X_{co_1} = \frac{5.9}{F_o} \qquad \text{(Eq. 3)}$
	Where:
	X_{co2} = CO ₂ correction factor, percent. 5.9 = 20.9 percent O ₂ -15 percent O ₂ , the defined O ₂ correction value, percent.
	(iii) Calculate the NO _X and SO ₂ gas concentrations adjusted to 15 percent O ₂ using CO ₂ as follows:
	$C_{adj} = C_d \frac{X_{co_2}}{\% CO_2} \qquad \text{(Eq. 4)}$
	Where:
	%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.
	(1) Identification of the specific parameters you propose to use as operating limitations;
	(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;
	(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;
	(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
	(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.
	(1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (<i>e.g.</i> , operator adjustment, automatic controller adjustment, etc.) or unintentionally (<i>e.g.</i> , wear and tear, error, etc.) on a routine basis or over time;
	(2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions;
	(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;
	(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;
	(6) For the parameters, a discussion identifying the frequency and methods for recalibrating the instruments you could use to monitor them; and
	(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.

$Monitoring, installation, collection, operation, and maintenance\ requirements.\ \S 63.6625$

§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).	
	(1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration.	
	(2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2).	
§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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.
- (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.
- (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (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.
- (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.
	(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).
	(2) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i> , process equipment) or the air pollution control and monitoring equipment.
	(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
	(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.
	(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.
	(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.
	(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).

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Appendix A

PSD Conditions – Permit # SE 94-01

Special Conditions – Plant Modernization

A. Certification

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

B. Performance Tests

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

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

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

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

C. Performance Testing for Dioxin/furan Emissions

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

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

D. Emission Limits for CO

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

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

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

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

E. Continuous Emission Monitoring

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

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

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

F. New Source Performance Standards

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

Agency Notifications

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

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

Appendix B

Compliance Air Monitoring (CAM)

Purpose:

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

Information Required:

- 1. Describe the indicators to be monitored [Section 64.4(a)(1)];
- 2. Describe the ranges or the processes to set indicator ranges [Section 64.4(a)(2)];
- 3. Describe the performance criteria for monitoring [Section 64.4(a)(3)] including;
 - a. Specification for obtaining representative data;
 - b. Verification procedures to confirm the monitoring operational status;
 - c. Quality assurance and control procedures;
 - d. Monitoring frequency
 - i. 4 times per hour (minimum) if post control emissions are \geq MST¹; or
 - ii. 1 time per day (minimum) if post control emissions are < MST.
- 4. Describe indicator ranges and performance criteria for a CEMS², COMS³, or PEMS⁴ [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)];

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 criteria²:

- 1. The emission unit is subject to an emission limitation or standard³ (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:

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

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.

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" fro emission units with control devices are subject to the CAM rule. Applicable requirements are federally-enforceable requirements are rules adopted by the District or the State and are approved by EPA as part of the State Implementation Plan (SIP) {aka "SIP approved Rules")

⁴ See District Rule 210.1.IV.E.

⁵ Hazardous Air Pollutants.

Tehachapi Cement Plant Version 2021 CAM Rule Applicability (Inherent Process Determination)

		able 1. Lehigh Cement West - Tehachapi - Inherent Process Equipment Determin		
mission Unit	Unit Description	Control Device #	Inherent	
001		Fabric Collector J6-428-DC	Y	
		Fabric Collector J6-429-DC	<u>.</u> Ү	
		Fabric Collector J7-367-DC	<u>'</u> Ү	
	Bulk & Sack Cement Loadout	Fabric Collector J7-410-DC	<u> </u>	
	Operation	Fabric Collector J3-200-DC	Y	
		Fabric Collector J3-200-DC	<u>Т</u>	
		Fabric Collector J3-201-DC Fabric Collector J3-202-DC	<u>т</u> Ү	
		Fabric Collector C3-150-DC	N	
		Fabric Collector C3-190-DC	N	
		Fabric Collector C4-150-DC	N	
003	Raw Material Storage & Handling Operation	Fabric Collector D1-020-DC	N	
		Fabric Collector D1-025-DC	N	
		Fabric Collector D2-075-DC	N	
		Fabric Collector S1-010-DC	N	
		Fabric Collector S2-115-DC	N N	
		Fabric Collector S4-115-DC	Y	
004	Raw Mill System	Fabric Collector S4-145-DC	<u> </u>	
001	Naw Pilli System	Fabric Collector S4-150-DC	<u> </u>	
		Fabric Collector S4-205-DC	<u> </u>	
		Dust Collector S3-160	Y	
		Fabric Collector S4-205-DC	Y Y	
005	Homogenizing & Kiln Feed System	Fabric Collector F1-185-DC Fabric Collector F1-235-DC	Y	
		Fabric Collector G7-125-DC	N	
		Dust Collector G7-238-DC	N	
		Fabric Collector G7-230-DC	N	
		Fabric Collector G7-232-DC	N	
000	Coal Drying & Pulverizing	Fabric Collector G7-420-DC	Υ	
006	System	Fabric Collector G7-505-DC	Y	
	System	Dust Collector G7-255-DC	N N	
		Dust Collector G7-515-DC	Y	
		Fabric Collectors (G7-315, G7-325, G7-335, G7-345)	Y	
		PAC Bin Vent Filter S4-51-DC	Y	
007	Preheater/Precalciner Portland Cement Kiln	Hydrated Lime Dust Collector G6-142-DC	Y	
		Kiln Baghouse S3-160-DC	Y	

008	Clinker Cooler	Dust Collector G6-210-DC	N
008	Cili kei Coolei	Clarcor Dust Collector G4-120-DC	N
		Fabric Collector G4-125-DC	N
009	Clinker Storage & Reclaim	Fabric Collector E1-130-DC	N
009	Operation	Fabric Collector E1-232-DC	N
		Fabric Collector E1-225-DC	N
		E3-135-DC Baghouse	N
010	B-3 Finish Mill	E3-345-DC Baghouse	Υ
		E3-385-DC Baghouse	Y
	<u> </u>	Fabric Collector E4-135-DC	N
	<u> </u>	Fabric Collector E4-420-DC	Y
011	B-4 Finish Mill	Fabric Collector E4-410-DC	Y
		Fabric Collector E4-430-DC	Y
		Fabric Collector E4-403-DC	Y
		Fabric Collector J1-331-DC	Y
	Cement Storage Silo & Loadout	Fabric Collector J2-105-DC	Y
012	Operation -	Fabric Collector J2-115-DC	Y
	Operation	Fabric Collector J2-205-DC	Y
		Fabric Collector J2-215-DC	Y
		Fabric Collector B2-120-DC	N
019	Primary and Secondary Crusher	Fabric Collector B2-320-DC	N
015	-	Fabric Collector B2-160-DC	N
		Fabric Collector B2-090-DC	N
022	Kiln Fabric Collector Fabric	Fabric Collector E3-385-DC	Y
023	Transfer System	Fabric Collector E4-410-DC	Y
025	Alternative Fuel Storage & Cement Processing	Dust Collector @ 4,415 cfm	N
		Fabric Collector E2-040-DC	Y
		Fabric Collector E2-110-DC	N
026	Roller Press Unit	Fabric Collector E2-350-DC	Y
		Fabric Collector E2-372-DC	Y
		Fabric Collector E2-387-DC	Y

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CAM Rule Applicability Determination

Table	2. Lehigh Cement West - Tehachapi - Detailed CAM Applicability Analysis 1																
									Unco	ntrolled Pote	ential to Emit		Subject to CAM?				
Emissi on Unit	Unit Description	Pollutant	Control Device Used?	Control Device #	Federally Enforceable Emission Limit or Standard	Reference	Continuous Compliance Determinati on Method?	Is Limit or Standard post 11/15/90?	PTE (tpy)	Above Major Source Threshold?	Reference	Yes/No	Reason				
				Fabric Collector C3-150-DC	0.05 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	22	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				
					Fabric Collector C3-190-DC	0.10 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	45	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.			
003	Raw Material Storage & Handling Operation	PM ₁₀	Yes	Fabric Collector C4-150-DC	0.01 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	3	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				
003		PIVI ₁₀	res	Fabric Collector D1-020-DC	0.05 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	22	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				
			-	Fabric Collector D1-025-DC	0.05 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	22	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				
									Fabric Collector D2-075-DC	0.19 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	85	No	See Table 2	No
004	Raw Mill	PM ₁₀		Fabric Collector S1-010-DC	0.10 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	44	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				
304	System	r 1·110	Yes	Fabric Collector S2-115-DC	0.11 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	48	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.				

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Tehachapi Cement Plant Version 2021 **CAM Rule Applicability Determination (cont.)**

				Fabric Collector G7-125-DC	0.08 lb/hr	Rule 210.1 and Rule 404.1	None	Rule 210.1: Adopted 3/19/74 Amended 5/4/00 Rule 404.1 Adopted 4/18/72 Amended 1/24/07	36	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.
				Dust Collector G7-238-DC	0.1 gr/scf	Rule 210.1 and Rule 404.1	None	Rule 210.1: Adopted 3/19/74 Amended 5/4/00 Rule 404.1 Adopted 4/18/72 Amended 1/24/07	15	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.
006	Coal Drying & Pulverizing System	PM ₁₀	Yes	Fabric Collector G7-230-DC	0.03 lb/hr	Rule 210.1 and Rule 404.1	None	Rule 210.1: Adopted 3/19/74 Amended 5/4/00 Rule 404.1 Adopted 4/18/72 Amended 1/24/07	15	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.
				Fabric Collector G7-232-DC	0.03 lb/hr	Rule 210.1 and Rule 404.1	None	Rule 210.1: Adopted 3/19/74 Amended 5/4/00 Rule 404.1 Adopted 4/18/72 Amended 1/24/07	15	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.
				Dust Collector G7-255-DC	0.05 lb/hr	Rule 210.1 and Rule 404.1	None	Rule 210.1: Adopted 3/19/74 Amended 5/4/00 Rule 404.1 Adopted 4/18/72 Amended 1/24/07	22	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are less than the major source threshold of 100 tpy for PM10.
	Preheater/Prec	SO ₂	Yes	Hydrated Lime Injection	1239.20 tpy	Rule 210.1	Yes	Not necessary to evalu compliance determina					
007	alciner	NO ₂	Yes	SNCR	1,232.24 tpy	Rule 210.1	Yes	compliance determine	PTC		current riue V	No	CAM does not apply per 40 CFR 64.2(b)(vi) as the unit is subject to a continuous compliance
007	Portland Cement Kiln	VOC	No	N/A	N/A	N/A	N/A		N/A	1		INO	determination method under the current Title V PTO.
	Cement Mill	СО	No	N/A	N/A	N/A	N/A						
008	Clinker Cooler	PM ₁₀	Yes	Dust Collector G6-210-DC	12.51 lb/hr	Rule 210.1	Yes	Not necessary to evalu compliance determina		nod under the		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.
000	Cillingi Coolel	F 1 ¹ 110	165	Clarcor Dust Collector G4-120- DC	0.19 lb/hr	Rule 210.1	None	Adopted 3/19/74 Amended 5/4/00	84.00	No	See Table 2	No	CAM does not apply per 40 CFR 64.2 as the pre- control potential emissions are below the major source threshold of 100 tpy for PM10.

Tehachapi Cement Plant Version 2021

CAM Rule Applicability Determination (cont.)

	IVI ILUIC	**PP**	Cubili	iy Determinano	ii (coiici)									
								Adopted 3/19/74					CAM does not apply per 40 CFR 64.2 as the pre-	
			Yes	Fabric Collector G4-125-DC	0.002 gr/scf	Rule 210.1	None	Amended 5/4/00	38	No	See Table 2	No	control potential emissions are less than the major	
													source threshold of 100 tpy for PM10.	
								Adopted 3/19/74					CAM does not apply per 40 CFR 64.2 as the pre-	
	ou i		Yes	Fabric Collector E1-130-DC	0.002 gr/scf	Rule 210.1	None	Amended 5/4/00	32	No	See Table 2	No	control potential emissions are less than the major	
	Clinker							, ,					source threshold of 100 tpy for PM10.	
009	Storage &	PM_{10}	.,	5 1 6 1 1 54 222 56	0.04 / 6	5 1 546 4		Adopted 3/19/74	20	l		. .	CAM does not apply per 40 CFR 64.2 as the pre-	
	Reclaim	10	Yes	Fabric Collector E1-232-DC	0.01 gr/scf	Rule 210.1	None	Amended 5/4/00	38	No	See Table 2	No	control potential emissions are less than the major	
	Operation					<u> </u>							source threshold of 100 tpy for PM10.	
													CAM applies per 40 CFR 64.2 as the pre-control	
			Vos	Eabric Collector E1 33E DC	0.01 av/ocf	Dulo 210 1	None	Adopted 3/19/74	225	Voc	Coo Table 2	Yes	potential emissions are greater than the major source threshold of 100 tpy for PM10. The CAM Plan	
			Yes	Fabric Collector E1-225-DC	0.01 gr/scf	Rule 210.1	None	Amended 5/4/00	225	Yes	See Table 2	res	provided with this submittal serves to fulfill the	
													requirements of 40 CFR 64.	
													CAM does not apply per 40 CFR 64.2 as the pre-	
010	B-3 Finish Mill	PM ₁₀	Yes	Baghouse E3-135-DC	0.22 lb/hr	Rule 210.1	None	Adopted 3/19/74	95	No	See Table 2	No	control potential emissions are less than the major	
010	0-31111311111111	F1*110	163	bagnouse E5-155-bc	0.22 10/111	Kule 210.1	None	Amended 5/4/00	95	INO	See Table 2	INO	source threshold of 100 tpy for PM10.	
													CAM does not apply per 40 CFR 64.2 as the pre-	
011	B-4 Finish Mill	PM ₁₀	Yes	Fabric Collector E4-135-DC	0.05 lb/hr	Rule 210.1	None	Adopted 3/19/74	22	No	See Table 2	No	control potential emissions are less than the major	
011		10	103	Tubile collector ET 133 BC	0.03 15/11	Raic 210.1	Hone	Amended 5/4/00		140	See Tuble 2	110	source threshold of 100 tpy for PM10.	
212	Outdoor													
013	Storage &	PM ₁₀	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Quarry	PM ₁₀	No											
014	Operation	SO ₂	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Piston Engine	PM ₁₀	No											
015	with Welder	10		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
013	#R5-508	SO_2	No	N/A	NA	14/7	14/75	IVA	I IV/A	13/7	14/75	11/7	19/4	
-		D14	NI-											
	Emergency	PM ₁₀	No											
	Use Piston							****						
016	Engine with		SO ₂ No	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Generator	2												
	#M2-101													
	Use Piston	PM_{10}	No											
017	Engine with	SO ₂	No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
	Concretor	302	140											
													CAM applies per 40 CFR 64.2 as the pre-control	
					0.01 gr/dscf			Adopted 3/19/74					potential emissions are greater than the major source	
			Yes	Fabric Collector B2-120-DC	3.7 - 3.7	Rule 210.1	Yes	Amended 5/4/00	1,411	Yes	See Table 2	Yes	threshold of 100 tpy for PM10. The CAM Plan	
													provided with this submittal serves to fulfill the	
													requirements of 40 CFR 64.	
													CAM applies per 40 CFR 64.2 as the pre-control	
													potential emissions are greater than the major source	
			Yes	Fabric Collector B2-320-DC	0.01 gr/dscf	Rule 210.1	Yes	Adopted 3/19/74	737	Yes	See Table 2	Yes	threshold of 100 tpy for PM10. The CAM Plan	
	Primary and		103	Tubile collector be 320 be	0.01 91/4361	Raic 210.1	163	Amended 5/4/00	, 3,	103	See Tuble 2	103	provided with this submittal serves to fulfill the	
019	Secondary	PM_{10}											requirements of 40 CFR 64.	
	Crusher												requirements or to entroll	
													CAM applies per 40 CFR 64.2 as the pre-control	
								Adopted 3/19/74					potential emissions are greater than the major source	
			Yes	Fabric Collector B2-160-DC	0.01 gr/dscf	Rule 210.1	Yes	Amended 5/4/00	120	Yes	See Table 2	Yes	threshold of 100 tpy for PM10. The CAM Plan	
								7 inchaca 5/ 1/00					provided with this submittal serves to fulfill the	
						ļ							requirements of 40 CFR 64.	
								Adopted 3/19/74	1 _				CAM does not apply per 40 CFR 64.2 as the pre-	
			Yes	Fabric Collector B2-090-DC	0.01 gr/dscf	Rule 210.1	Yes	Amended 5/4/00	74	No	See Table 2	No	control potential emissions are less than the major	
									<u> </u>	<u> </u>			source threshold of 100 tpy for PM10.	

CAM Rule Applicability Determination (cont.)

021	Quarry Drilling Operation	PM ₁₀ SO ₂ NO ₂ VOC CO	No No No No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
022	Aboveground Gasoline	N/A	Yes	Phase I and Phase II recovery	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
024	Quarry Drilling Operation	PM ₁₀ SO ₂ NO ₂ VOC CO	No No No No	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
025	Alternative Fuel Storage & Cement Processing	PM ₁₀	Yes	Dust Collector @ 4,415 cfm	0.38 lb/hr	Rule 210.1	Yes	Adopted 3/19/74 Amended 5/4/00	110	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 PM10. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64.
026	Roller Press Unit	PM ₁₀	Yes	Fabric Collector E2-110-DC	0.005 gr/scf	Rule 210.1	Yes	Adopted 3/19/74 Amended 5/4/00	110	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 PM10. The CAM Plan provided with this submittal serves to fulfill the requirements of 40 CFR 64.
1. Inh	erent process eau	uipment ident	tified in Table	1 has been excluded from this an	alvsis.								

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imission Unit	Unit Description	Control Device	Pollutant	Daily Emission Limit (lb/day)	Total Controlled Emissions ¹ (tpy)	Total Uncontrolled Emissions ^{2,3} (tpy)	Above Major Source Threshold?
		Fabric Collector C3-150-DC		1.23	0.22	22.00	No
		Fabric Collector C3-190-DC		2.47	0.45	45.00	No
002	Day Makerial Character O. Hardling Occupion	Fabric Collector C4-150-DC	3.00	No			
003	Raw Material Storage & Handling Operation	Fabric Collector D1-020-DC		PM ₁₀			
		Fabric Collector D1-025-DC		1.23	0.22	22.00	No
		Fabric Collector D2-075-DC		4.65	0.85	85.00	No
004	Davi Mill Contain	Fabric Collector S1-010-DC	DM	2.40	0.44	44.00	No
004	Raw Mill System	Fabric Collector S2-115-DC	PM ₁₀	2.64	0.48	48.00	No
		Fabric Collector G7-125-DC		1.95	0.36	36.00	No
		Dust Collector G7-238-DC		0.82	0.15	15.00	No
006	Coal Drying & Pulverizing System	Fabric Collector G7-230-DC	PM ₁₀	0.82	0.15	15.00	No
		Fabric Collector G7-232-DC		0.82	0.15	15.00	No
		Dust Collector G7-255-DC		1.23	0.22	22.00	No
800	Clinker Cooler	Clarcor Dust Collector G4-120-DC	PM ₁₀	4.63	0.84	84.00	No
		Fabric Collector G4-125-DC		2.06	0.38	38.00	No
		Fabric Collector E1-130-DC		1.73	0.32	32.00	No
009	Clinker Storage & Reclaim Operation —	Fabric Collector E1-232-DC	PM ₁₀	2.06	0.38	38.00	No
		Fabric Collector E1-225-DC		12.34	2.25	225.00	Yes
010	B-3 Finish Mill	Baghouse E3-135-DC	PM ₁₀	5.18	0.95	95.00	No
011	B-4 Finish Mill	Fabric Collector E4-135-DC	PM ₁₀	1.23	0.22	22.00	No
		Fabric Collector B2-120-DC		77.32	14.11	1,411.00	Yes
040		Fabric Collector B2-320-DC		40.37	7.37	737.00	Yes
019	Primary and Secondary Crusher —	Fabric Collector B2-160-DC	PM ₁₀	6.56	1.20	120.00	Yes
		Fabric Collector B2-090-DC			0.74	74.00	No
025	Alternative Fuel Storage & Cement Processing	Dust Collector @ 4,415 cfm	PM ₁₀	6.05	1.10	110.00	Yes
026	Roller Press Unit	Fabric Collector E2-110-DC	PM ₁₀	6.03	1.10	110.00	Yes

Emission Units Subject to CAM

EKA PCD Form 201.1-L							
Company/Facility Name:	Lehigh Cement West, Inc.						
Title V Facility Number:	1221						
Emissions Unit	signione Unit		ed Emissions	Connected to Control Unit		Controlled Emissions	
Permit or Equipment No.	Equipment Description	Pollutant	PTE (tons/year)	Permit or Equipment No.	Control Equipment Description	Pollutant	PTE (tons/year)
009	Clinker Storage & Reclaim Operation	PM ₁₀	225	009	Fabric Collector E1-225-DC	PM ₁₀	2.25
		PM ₁₀	1,411		Fabric Collector B2-120-DC	PM ₁₀	14.11
019	Primary and Secondary Crusher	PM ₁₀	737	019	Fabric Collector B2-320-DC	PM ₁₀	7.37
		PM ₁₀	120		Fabric Collector B2-160-DC	PM ₁₀	1.20
025	Alternative Fuel Storage & Cement Processing	PM ₁₀	110	025	Dust Collector @ 4,415 cfm	PM ₁₀	1.10

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CAM Plan

The following pollutant specific emission unit(s) (PSEU) are subject to the Compliance Assurance Monitoring (CAM) Rule in 40 CFR 64.

Table 1. Emission Units Subject to 40 CFR 64, Compliance Assurance Monitoring Rule

Table 1. Emission Units Subject	t to 40 CFR 64, Compliance A	ssurance Monitoring F	uue			1	
Equipment Permit ID	Pollutant	Control Device ID	Affected Source Type	Applicable Rules	Applicable Emission Limits	Portland Cement NESHAP Applicable	NSPS Applicable
1221009	PM_{10}	E1-225-DC	Clinker Withdrawal and Conveying System	60 Subpart F 63 Subpart LLL District Rule 422 District Rule 210.1	5% opacity (Rule 210.1) 10% opacity (60 Subpart F & 63 Subpart LLL) 0.01 gr/scf (Rule 210.1) 0.01 gr/scf (2.51 lb/hr; 12.34 lb/day; 2.25 tons/yr (Rule 210.1) whichever is most stringent (§60.62(d))	Yes § 63.1345 Emissions 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.
1221019	PM_{10}	B2-120-DC	Primary & Secondary Crusher System	60 Subpart OOO District Rule 404.1? District Rule 422 District Rule 210.1	5% opacity (Rule 210.1) 7% or 12% opacity (60 Subpart OOO) 15% Visible Emissions from Front End Loaders loading hoppers 0.01 gr/scf (Rule 210.1) 0.01 gr/scf, 3.22 lb/hr; 77.32 lb/day; 14.11 tons/yr (Rule 210.1) Crushing, Transfer, & Loading: 0.26 lb/hr; 6.29 lb/day; 1.15 ton/yr	No	Yes § 60.672 Standards for particulate matter (PM), Table 2 to Subpart OOO of Part 60 - Stack Emission Limits for Affected Facilities with Capture Systems.
1221019	PM ₁₀	B2-320-DC	Primary & Secondary Crusher System	60 Subpart OOO District Rule 404.1? District Rule 422 District Rule 210.1	5% opacity (Rule 210.1) 7% or 12% opacity (60 Subpart OOO) 15% Visible Emissions from Front End Loaders loading hoppers 0.01 griscf (Rule 210.1) 0.01 griscf (Rule 210.1) 0.01 gridocf; 1.68 lo/ln; 40.37 lb/day; 7.37 tons/yr (Rule 210.1) Crushing, Transfer, & Loading: 0.26 lb/hr; 6.29 lb/day; 1.15 ton/yr	No	Yes § 60.672 Standards for particulate matter (PM), Table 2 to Subpart OOO of Part 60 - Stack Emission Limits for Affected Facilities with Capture Systems.
1221019	PM_{10}	B2-160-DC	Primary & Secondary Crusher System	60 Subpart OOO District Rule 404.1? District Rule 422 District Rule 210.1	5% opacity (Rule 210.1) 7% or 12% opacity (60 Subpart OOO) 13% Visible Emissions from Front End Loaders loading hoppers 0.01 grisef (Rule 210.1) 0.01 grisef (\$0.27 lb/hr; 6.56 lb/day; 1.20 tons/yr (Rule 210.1) Crushing, Transfer, & Loading: 0.26 lb/hr; 6.29 lb/day; 1.15 ton/yr	No	Yes § 60.672 Standards for particulate matter (PM), Table 2 to Subpart OOO of Part 60 - Stack Emission Limits for Affected Facilities with Capture Systems.
1221025	PM_{10}	4,415 cfm DC	Alternative Fuel Storage & Feeding System	District Rule 210.1	5% Opacity (Rule 210.1) 20% Opacity @ Docking Station & Feeders (Rule 210.1) 0.01 gr/scf (Rule 210.1) 0.38 lb/hr, 6.05 lb/day; 1.59 ton/yr	No	No
1221026	PM_{10}	E2-110-DC	Clinker Roller Press System	60 Subpart F 63 Subpart LLL District Rule 422 District Rule 210.1	5% Opacity (Rule 210.1) 0.005 gg/scf (Rule 210.1) 0.25 lb/hr; 6.03 lb/day; 1.10 ton/yr (Rule 210.1)	Yes § 63.1345 Emissions 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.

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 PM₁₀ emissions from the PSEUs listed in Table 1.

POLLUTANT:	INDICATOR:	INDICATOR:
PM_{10}	Pressure Drop/Stack Observations	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 tenminute visible emissions check. For PSEUs not subject to NESHAP LLL, the duration of each M22 visible emissions check shall consist of a minimum sixminute 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 ₂ O. 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 ₂ O. 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 (CO₂), Nitrous oxide (N₂O), Methane (CH₄), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), and Sulfur Hexafluoride (SF₆).

Reported for the year 2018

reported for the y	7 Cui 2010												
GHG EMISSIONS (short tons per year)													
Pollutants:	CO_2	CH ₄	N ₂ O	HFCs	PFCs	SF ₆	Total						
Emissions (tpy):	627,581	26.23116	3.76499	N/A	N/A	N/A							
*GWP:	1	21	310	**	**	23,900							
CO2e (tpy):	627,581	550.85	1167.147	N/A	N/A	N/A	629,418.75						

^{*}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