

**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:** National Cement Company of California, Inc.

**Location:** (5 Miles East of I-5 on Hwy. 138)  
Lebec, California 93243

**Mailing Address** 15821 Ventura Boulevard, Suite 475  
Encino, CA 91436

**Permit No:** 1128-V-2000

**Issuance Date:** Pending

**Expiration Date:** Pending

**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 EPA.

By:

Gary Ray, Jr.  
Air Pollution Control Officer

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### **General Permit Conditions**

In accordance with CH&SC, Sections 39002 and 42301.10 through 42301.12 and all applicable District Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit:

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

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
5.	<p><b><u>Severability</u></b></p> <p>If any provision, clause, sentence, paragraph, section or part of these Regulations or application thereof to any person or circumstance shall for any reason be adjudged by a court of competent jurisdiction to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of this Regulation and the application of such provision to other persons or circumstances, but shall be confined in its operation to the provision, clause, sentence, paragraph, section or part thereof directly involved in the controversy in which such judgment shall have been rendered and to the person or circumstance involved, and it is hereby declared to be the intent of the Eastern Kern Air Pollution Control Board that these Regulations would have been issued in any case had such invalid provision or provisions not been included.</p>	Reg. I, Rule 114
6.	<p><b><u>Applicability of Federally Enforceable Conditions</u></b></p> <p>Federally Enforceable Conditions <b>shall apply</b> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits. Any District or State-only condition (not required by the EPA) does not apply.</p>	Reg. II, Rule 201.1
7.	<p><b><u>Compliance with Permit Conditions</u></b></p> <p>A. National Cement shall comply with all permit conditions;</p> <p>B. Permit does not convey any property rights or any exclusive privilege;</p> <p>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</p> <p>D. National Cement shall not use “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition;</p> <p>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</p> <p>F. Within a reasonable time period, National shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</p>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
8.	<p><b><u>Permit Life</u></b></p> <p>The life of this permit shall be five years from the date of issuance.</p>	Reg. II, Rule 201.1
9.	<p><b><u>Administrative Permit Amendment and Minor Permit Modification</u></b></p> <p>Administrative Permit Amendment and Minor Permit Modification are those actions taken by the District as defined in Rule 201.1.</p>	Reg. II, Rule 201.1
10.	<p><b><u>Emergency Provisions</u></b></p> <p>A. National Cement shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. all District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;</p> <p>B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:</p> <ol style="list-style-type: none"> <li>1) An emergency occurred;</li> <li>2) The permittee can identify the cause(s) of the emergency;</li> <li>3) The facility was being properly operated at the time of the emergency;</li> <li>4) All steps were taken to minimize the emissions resulting from the emergency; and</li> <li>5) Within two working days of the emergency event, the permittee provided the District with a description of the emergency and any mitigating or corrective actions taken;</li> </ol> <p>C. In any enforcement proceeding, the permittee has the burden of proof for establishing that an emergency occurred.</p>	Reg. II, Rule 201.1
11.	<p><b><u>Referencing of District and Applicable Requirements</u></b></p> <p>Pursuant to Rule 201.1.VI.C. District hereby references the following documents which are clearly identified and available to the District and to the public:</p> <p>Each reference shall include, at a minimum, title or document number, author and recipient if applicable, date, citation of relevant sections of the Rule or document, and identification of specific source activities or equipment for which the referencing applies.</p>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
12.	<p><b><u>Record Keeping</u></b></p> <p>A. Recording of maintenance of all monitoring and support information associated with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not submitted by such permit streamlining requirement(s) or District-only rules, including:</p> <ol style="list-style-type: none"> <li>1) Date, place, and time of sampling;</li> <li>2) Operating conditions at time of sampling;</li> <li>3) Date, place, and method of analysis; and</li> <li>4) Results of analysis;</li> </ol> <p>B. Retention of records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application; and</p> <p>C. Any other record keeping deemed necessary by the APCO to ensure compliance with all permit streamlining requirements imposed in accordance with Rule 201.1, Subsection VI.J., all District-only rules which apply in accordance with Rule 201.1, Subsection VI.K.1., and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules.</p>	Reg. II, Rule 201.1
13.	<p><b><u>Right of Entry</u></b></p> <p>National Cement shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</p> <ol style="list-style-type: none"> <li>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;</li> <li>B. Inspection and duplication of records required by the permit to operate; and</li> <li>C. Source sampling or other monitoring activities.</li> </ol>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
14.	<p><b><u>Reporting</u></b></p> <p>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with Rule 111;</p> <p>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO. Semi-annual report is due by August 31 of each year, annual report is due by March 31 of each year;</p> <p>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</p> <p>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</p> <ol style="list-style-type: none"> <li>1) Date when compliance will be achieved,</li> <li>2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and</li> <li>3) Log of any preventative or corrective action taken; and</li> </ol> <p>E. Each monitoring report shall be accompanied by a written statement from the responsible official certifying the truth, accuracy, and completeness of the report.</p>	Reg. II, Rule 201.1
15.	<p><b><u>Testing</u></b></p> <p>National Cement 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 #SE95-01 and District Rule 210.1)</p>	Reg. II, Rule 201.1



	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
16.	<p><b><u>Periodic Monitoring</u></b></p> <p><b><u>Non-Point</u></b></p> <p>National Cement shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active non-point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source and that source is not operating under breakdown condition as defined in and allowed for in District Rule 111, National Cement shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard.</p> <p>NOTE: This requirement does not apply to fugitive emissions resulting from activities not covered by a permit to operate unless the source is subject to District Rule 210.1 (NSR) requirements.</p> <p><b><u>Point</u></b></p> <p>National Cement shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all active/in use point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 111, National Cement shall conduct testing on that point source:</p> <p>A. Within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with the visible emission standard. If compliance is not documented:</p> <p>B. Within 30 days of the Method 9 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of District Rules 404.1, 405, 406 and/or 210.1.</p>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
17.	<p><b><u>Additional Monitoring</u></b></p> <p>Diesel standby and emergency piston engines do not require opacity monitoring if utilizing California diesel or other low-sulfur, low aromatic fuel including PUC natural gas, LPG, and propane.. Fuel records shall be kept for verification purposes and an operational log for hours of operation.</p> <p>All control equipment shall be inspected annually for proper operation. National Cement shall maintain all records of control equipment maintenance for a period of five years.</p> <p>Monitoring shall be the responsibility of the source; however, a visible emissions inspection or Method 9 conducted by a District inspector may be counted as meeting the requirement for the source to conduct same if the information and records generated by the inspector meets the requirements of the permit and a copy of the records are maintained by the source for a period of five years.</p> <p>Record keeping provisions associated with all monitoring requirements shall include the following information:</p> <ul style="list-style-type: none"> <li>A. Identification of stack or emission point being monitored;</li> <li>B. Operational conditions at the time of monitoring;</li> <li>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</li> <li>D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action.</li> </ul>	Reg. II, Rule 201.1

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
18.	<p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Portland Cement Kilns - Oxides of Nitrogen)</p> <p>Continuous NO<sub>x</sub> emissions monitoring system records and clinker production records for the cement kiln shall be maintained at the facility for a period of at least five years and made readily available to District personnel.</p> <p>Oxides of nitrogen stack testing for purposes of this requirement shall be conducted using EPA Test Method 7E.</p> <p>Stack gas flow rate testing for purposes of this requirement shall be conducted using EPA Test Method 2.</p> <p>The following formula shall be used to convert uncorrected observed NO<sub>x</sub> concentration in ppm to tons per day at standard conditions of 68° F and a gas pressure of 29.92 inches of mercury:</p> $\frac{Tons \cdot NO_x}{day} = (ppmv \cdot NO_x) \times \left( \frac{46 grams}{mole} \right) \times (1.56 \times 10^{-7}) \left( \frac{dscf}{min} \right) \times (0.0120)$	Reg. II, Rule 201.1
19.	<p><b><u>Conditional Approval</u></b></p> <p>The Control Officer shall issue an Authority to Construct or a Permit to Operate, subject to conditions to insure compliance of the operation of any article, machine, equipment or other contrivance within the standards of Rule 208 and 208.1, in which case the conditions shall be specified in writing. Commencing work under such Authority to Construct or operation under such Permit to Operate shall be deemed acceptance of all conditions so specified. The Control Officer shall issue an Authority to Construct or Permit to Operate with revised conditions upon receipt of a new application, if the applicant demonstrates the article, machine, equipment or other contrivance can be operated within the standards of Rule 208 and 208.1 under the revised conditions.</p>	Reg. II, Rule 209

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
20.	<p><b><u>Standards for Authority to Construct</u></b></p> <p>A. The Permittee may make a change to this permitted facility that is not addressed or prohibited by the federally enforceable conditions of this Part 70 permit without obtaining a Part 70 permit revision if:</p> <ol style="list-style-type: none"> <li>1) The Permittee has obtained all permits and approvals required by District Rules 201 and 210.1 (unless the change is exempt under District Rule 202);</li> <li>2) The change is not subject to any requirements under Title IV of the Clean Air Act;</li> <li>3) The change is not a Title I modification; and</li> <li>4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit.</li> </ol> <p>B. For a change that qualified under this section, the Permittee shall provide contemporaneous written notice to the District and the U.S. EPA (except for a change that is exempt under District Rule 202). This written notice shall describe the change, including the date it was made, and shall contain other information as required to determine new applicable requirements of the Clean Air Act that apply as a result of the change;</p> <p>C. Upon satisfying the requirements of paragraph B above, the Permittee may make the proposed change;</p> <p>D. Changes that qualify under this section are not subject to the requirements for Part 70 revisions;</p> <p>E. The Permittee shall include each off-permit change made under this section in the application for renewal of this Part 70 permit; and</p> <p>F. The permit shield(s) provided in this permit do not apply to off-permit changes made under this section.</p>	Reg. II, Rule 210.1 Section IV. D.3
21.	<p><b><u>Prevention of Significant Deterioration (PSD)</u></b></p> <p>National Cement May be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if it undergoes major modification(s).</p>	Reg. II, Rule 210.4

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
22.	<p><b><u>Permit Fees</u></b></p> <p>Every applicant for an Authority to Construct or a Permit to Operate shall pay a filing fee. For issuance of an Authority to Construct, or an initial Permit to Operate, the applicant shall pay fees as prescribed in Rule 301. For issuance of an Authority to Construct, application processing fees shall also be paid as prescribed in Rule 303. The applicant shall receive credit for filing fees paid.</p> <p>Annually on the anniversary of issuance of a Permit to Operate, the permittee shall pay a renewal fee as prescribed in Rule 301. Fees collected pursuant to Rule 201.1, Section VIII.B. shall supplement applicable Rules 301 and 301.3 fee requirements.</p> <p><b><u>Payment of Supplemental Fee</u></b></p> <p>An owner or operator, or his designee, shall pay an annual supplemental fee for a permit to operate pursuant to Rule 201.1 as determined by the calculation method in Subsection VIII.B.3., to provide a District-wide fee rate of \$25 per ton of fee-based emissions (CPI-adjusted) for all facilities subject to Rule 201.1, unless Rule 201.1 VIII.B.2. applies.</p>	<p>Reg. III, Rule 301</p> <p>Rule 201.1 Section VIII. B.</p>
23.	<p><b><u>Greenhouse Gas Fee</u></b></p> <p>Any stationary source that has actual GHG emissions, in the prior calendar year, greater than or equal to 100,000 tons of CO<sub>2</sub>e, as calculated in accordance with 40 CFR Part 98, shall pay a Consumer Price Index (CPI) adjusted GHG fee per ton of CO<sub>2</sub>e 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.</p>	Reg. III, Rule 301.4
24.	<p><b><u>Visible Emissions</u></b></p> <p>Unless otherwise stated in equipment specific permits, the following limits apply:</p> <p><b><u>Limits</u></b></p> <p>A person shall not discharge into the atmosphere, from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:</p> <p>A. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines, or</p> <p>B. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in Subsection A.</p>	Reg. IV, Rule 401

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
25.	<p><b><u>Particulate Matter Concentration - Desert Basin</u></b></p> <p>A. A person shall not discharge into the atmosphere from any single source operation, in service on the date this Rule is adopted, particulate matter in excess of 0.2 grains per cubic foot of gas at standard conditions.</p> <p>B. A person shall not discharge into the atmosphere from any single source operation, the construction or modification of which commenced after the adoption of this Rule, particulate matter in excess of 0.1 grains per cubic foot of gas at standard conditions.</p>	Reg. IV, Rule 404.1
26.	<p><b><u>Particulate Matter - Emission Rate</u></b></p> <p>A person shall not discharge into the atmosphere from any source operation, particulate matter in excess of the limits set forth in the allowable particle emissions based on process weight rate table included in Rule 405.</p>	Reg. IV, Rule 405
27.	<p><b><u>Process Weight - Portland Cement Kilns</u></b></p> <p>Cement kilns, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter in excess of the Environmental Protection Agency Standards of Performance. Cement kilns regulated by this Rule are not subject to other process weight Rules.</p>	Reg. IV, Rule 406
28.	<p><b><u>Sulfur Compounds</u></b></p> <p>A person shall not discharge into the atmosphere sulfur compounds, which would exist as a liquid or gas at standard conditions, exceeding in concentration at the point of discharge: 0.2 percent by volume calculated as sulfur dioxide (SO<sub>2</sub>).</p>	Reg. IV, Rule 407
29.	<p><b><u>Fuel Burning Equipment - Combustion Contaminants</u></b></p> <p>A. Fuel burning equipment, the construction or modification of which is commenced after August 17, 1971, shall not discharge into the atmosphere particulate matter, sulfur dioxide or nitrogen oxides in excess of the Environmental Protection Agency Standard of Performance.</p> <p>B. A person shall not discharge into the atmosphere combustion contaminants exceeding in concentration at the point of discharge: 0.1 grain per cubic foot of gas calculated to 12 percent of carbon dioxide (CO<sub>2</sub>) at standard conditions.</p>	Reg. IV, Rule 409

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
30.	<p><b><u>Organic Solvents</u></b></p> <p>A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).</p> <p>On and after March 8, 2024, from all VOC-containing materials, equipment, and processes subject to this rule, an operator shall not emit to the atmosphere VOCs in excess of 450 pounds VOC per calendar month per facility.</p> <p>1. Compliance with provisions above may be obtained through use of any of the following or any combination thereof:</p> <ol style="list-style-type: none"> <li>Product reformulation or substitution;</li> <li>Process changes;</li> <li>Improvement of operation efficiency;</li> <li>Development of innovative technology;</li> </ol>	Reg. IV, Rule 410
31.	<p><b><u>Organic Solvent Degreasing Operation</u></b></p> <p>A person shall not operate any organic solvent degreasing operation unless the equipment utilized complies with all applicable requirements of Rule 410.3.</p>	Reg. IV, Rule 410.3
32.	<p><b><u>Storage of Organic Liquids</u></b></p> <p>A person shall not use equipment to store organic liquids and petroleum distillates with a true vapor pressure greater than 1.5 psia unless provisions are made for controlling organic vapors.</p>	Reg. IV, Rule 411
33.	<p><b><u>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</u></b></p> <p>No person shall transfer or permit the transfer of gasoline from any delivery vessel into any stationary storage container subject to requirements of this rule unless:</p> <ol style="list-style-type: none"> <li>Such container, except those used for aviation gasoline, is equipped with an CARB certified permanent submerged fill pipe and utilizes an CARB certified Phase I vapor recovery system that is maintained and operated according to manufacturer specifications and the applicable CARB Executive Order; or</li> <li>Containers used for aviation gasoline are equipped with a permanent submerged fill pipe and a Phase I vapor recovery system that is certified (or was previously certified) to meet a minimum volumetric control of 95%.</li> </ol>	Reg. IV, Rule 412

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
34.	<p><b><u>Transfer of Gasoline into Vehicle Fuel Tanks</u></b></p> <p>A person shall not transfer or permit the transfer of gasoline from a stationary storage container into a motor vehicle fuel tank with a maximum capacity of more than five (5) gallons unless the gasoline-dispensing unit is equipped with, and has in operation a CARB-Certified Phase II Vapor Recovery System.</p> <ol style="list-style-type: none"> <li>1. All CARB certified Phase II vapor recovery systems shall be maintained according to CARB certifications and the manufacturer specifications applicable to the system.</li> <li>2. All CARB certified Phase II vapor recovery systems and gasoline dispensing equipment shall be maintained without leaks as determined in accordance with the test method in Section V.D.4.</li> </ol>	Reg. IV, Rule 412.1
35.	<p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Applies to EU 018) (Gasoline Storage - Phase I)</p> <ol style="list-style-type: none"> <li>A. All records required to demonstrate compliance with the requirements of Rule 412 shall be retained on the premises for a minimum of five (5) years and made available on site during normal business hours to the District upon request.</li> <li>B. Operators shall conduct all performance tests required by CARB Executive Order and facility installation and operations manual as per the frequency outline therein.</li> <li>C. The Reid Vapor Pressure of gasoline shall be determined in accordance with ASTM D 5191-01.</li> <li>D. All test procedures shall be conducted in accordance with the latest version of the test procedures, or their equivalents as approved in writing by the APCO and EPA.</li> </ol>	Reg. IV, Rule 412



	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
36.	<p><b><u>Monitoring, Testing, Record Keeping Requirements</u></b> (Applies to EU 018) (Gasoline Storage &amp; Dispensing - Phase II)</p> <p>A. Verification that each CARB-Certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in Rule 412.1 Subsection V.C shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing.</p> <p>B. Operators shall comply with the CARB certified Phase II vapor recovery system performance tests specified in Sections V.C.1.a through V.C.1.D of Rule 412.1, and shall conduct all applicable performance tests at start up and thereafter (no more than 30 days before or after the required compliance testing date) as required by the applicable CARB Executive Order and installation and operation days.</p> <p>C. Tests shall be conducted in accordance with the latest version of the CARB and EPA approved test methods, or their equivalents as approved by the EPA, and the APCO.</p>	Reg. IV, Rule 412.1
37.	<p><b><u>Nuisance</u></b></p> <p>A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health or safety of any such persons or the public or which cause or have a natural tendency to cause injury or damage to business or property.</p>	Reg. IV, Rule 419
38.	<p><b><u>Federal New Source Performance Standards (NSPS)</u></b></p> <p>Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with standards, criteria and requirements set forth therein.</p> <p>All applicable requirements of 40 CFR Part 60, Subparts A, (General Requirements), F (Portland Cement Plants), and IIII (Compression Ignition Internal Combustion Engines), apply to this facility.</p> <p><b>Subpart F</b> Standards of Performance for Portland Cement Plants Provisions of this subpart apply to the kiln, clinker cooler, raw mill system, finish mill system, raw mill dryer, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.</p>	Reg. IV, Rule 422

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
39.	<p><b><u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u></b></p> <p>Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.</p> <p>All applicable requirements of 40 CFR Part 61, Subpart M (Asbestos) and 40 CFR Part 63, Subparts A (General Provisions), LLL (Portland Cement Manufacturing Industry), and ZZZZ (RICE) apply to this facility.</p> <p><b>Asbestos</b> National Cement 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.</p> <p>For the purposes of 40 CFR Part 63, Subpart LLL, “Significant Change” is defined as the use by the facility of a fuel or alternate raw material that is a Federally regulated hazardous waste. The normal use of District approved fuels and/or fuel blends and District approved raw materials or raw material blends does not constitute a “significant change” in operation of the facility.</p> <p>For the purposes of 40 CFR Part 63, Subpart ZZZZ, “Stationary Reciprocating Internal Combustion Engines” You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.</p>	Reg. IV, Rule 423
40.	<p><b><u>Risk Management Plan</u></b></p> <p>Should this stationary source, as defined in 40 CFR 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 CFR part 70 or 71.</p>	40 CFR 68

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

	<b>Federally Enforceable Conditions</b>	<b>Reg/Rule</b>
42.	<p><b><u>Protection of Stratospheric Ozone</u></b></p> <p>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.</p> <p>Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.</p> <p>Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.</p>	40 CFR Part 82
43.	<p><b><u>Clean Air Act</u></b></p> <p>Should this stationary source, as defined in 40 C.F.R. section 68.3, become subject to the accidental release prevention regulations in part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in section 68.10 and shall certify compliance with the requirements of part 68 as part of the annual compliance certification as required by 40 C.F.R. part 70 or 71.</p>	CAA Section 112(r)(7)

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

This equipment is subject to generally applicable requirements under title V.

Above Ground Fuel Oil Storage Tanks

Air Conditioning Equipment

Atomic Absorption

Below Ground Diesel Storage Tanks

Boilers & Heaters < 5 MM Btu/hr

Bunsen Burners

Inductively Coupled Plasma

Motor Vehicles as Defined in the CH&SC

Portable IC Engines - California Registered

Small Degreaser

Small IC Engines < 50 bhp

Space Heating Equipment

Spectro Photometer

Steam Cleaners, Natural Gas

Water Heaters, Natural Gas

Welding Equipment

## **Process Diagrams**

*Confidential*

DRAFT

Emission Unit 001 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	001	Primary Crushing & Ore Storage

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Primary Crushing & Ore Storage, including following equipment:

- A. Ore receiving hopper (31-BN-01) with dust suppressant sprays;
- B. Wobbler feeder (31-WO-01);
- C. Crusher (31-CR-01) ventilated to item D;
- D. Fabric collector (31-DC-01) serving crusher;
- E. Conveyor (31-BC-01) with dust suppressant sprays at transfer point, oversize material grizzly (31-GZ-01);
- F. Flop gate (31-FG-01) with discharge to stacking conveyor 31-BS-01 or belt conveyor 31-BC-03;
- G. Stacking conveyor (31-BS-01);
- H. Belt conveyor (31-BC-03) and flop gate (31-FG-02) with discharge to belt conveyor 32-BC-06 or 31-BC-04;
- I. Belt conveyor (31-BC-04) with discharge to belt conveyor (34-BC-09) and ventilated to dust collector 34-DC-07;
- J. Fabric collector (31-DC-03) with fan (31-FA-03) serving transfer points of belt conveyors 31-BC-01 to 31-BC-03, and 31-BS-01;
- K. Screw conveyor 31-SC-03 serving dust collector 31-DC-03 with discharge to belt conveyor 31-BC-03;
- L. Fabric collector (31-DC-04) with fan (31-FA-04) serving transfer points of belt conveyors 31-DC-03 to 31-BC-04 and 31-BC-06 with dust discharge to belt conveyor 32-BC-06;
- M. Shale storage building (95 SHAL);
- N. Outside silica sand storage pile with wind barrier;
- O. Outside iron ore storage pile with wind barrier; and
- P. Outside clay (alumina bearing materials) storage pile with wind barrier.

**OPERATIONAL CONDITIONS:**

- 1. Dust suppressant or water shall be applied to outdoor crusher storage pile if visible emissions exceed 10%. (Rule 210.1)
- 2. Shale storage shall only occur in shale storage building. (Rule 210.1)
- 3. Dust suppressant or water shall be applied to outdoor crusher storage pile if visible emissions exceed 10%. (Rule 210.1)
- 4. Drop heights shall be kept at a minimum to limit visible emissions. (Rule 210.1)
- 5. Visible emissions from outdoor storage, conveyor transfer points and bulk loading and unloading systems shall be limited to 10% opacity. (Rule 422)
- 6. Wind barriers shall be located to protect storage pile from prevailing wind. (Rule 210.1)

Emission Unit 001 Permit Conditions

7. Height of storage piles shall not exceed height of wind barrier. (Rule 210.1)
8. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
9. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
10. Material collected in dust collectors shall be disposed in manner preventing entrainment in atmosphere. (Rule 209)
11. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
12. Sprays shall be maintained on primary crusher hopper and ore stacker to control dust emissions. (Rule 209)
13. Sufficient moisture content of raw materials shall be maintained such that visible emissions from all emission points (except items A, B, C, D, F, J, M, N, and O) shall be less than 5% opacity; items M, N and O shall be less than 10% opacity. (Rule 210.1 BACT)
14. Items A, B, C, D, F, and J shall be less than 20% opacity. (Rule 401)
15. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)
16. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
17. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
18. 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)

**EMISSION LIMITS:**

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

**Particulate Matter:**

Fabric Collector 31-DC-01: (@ 12,000 acfm)	0.025	gr/acf
	2.57	lb/hr
	61.71	lb/day
	11.26	ton/yr
Fabric Collector 31-DC-03: (@ 6,200 acfm)	0.011	gr/scf
	0.74	lb/hr
	17.65	lb/day
	3.22	ton/yr



Emission Unit 001 Permit Conditions

**Particulate Matter:**

Fabric Collector 31-DC-04:	0.011	gr/dscf
(@ 7,500 acfm)	0.72	lb/hr
	17.20	lb/day
	3.14	ton/yr

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

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

Emission Unit 001 Permit Conditions

**SPECIAL CONDITIONS:**

- aa. All equipment shall be designed, installed and operated as described in application for Authority to Construct unless advance approval is granted for alternative.
- bb. Average stockpile size and fugitive dust emissions from storage, crushing, and handling shall not exceed the following:

<b>SOURCE</b>	<b>Size (acres)</b>	<b>Maximum Throughput (Tons/Year)</b>	<b>PM<sub>10</sub> Emissions (Tons/Year)</b>
Shale	0.23	1	2
Silica	0.42	1	2
Iron Ore	0.1	1	2
Alumina bearing materials (clay)	0.2	1	2

<sup>1</sup>-Combined annual throughput of limestone, shale, sand, iron ore, alumina bearing materials, and iron ore (see PTO 1128002) shall not exceed 1,927,872 tons per year. (Rules 209 and 210.1, and District Fugitive Dust Policy #95-02)

<sup>2</sup>-Emission limits for storage and handling of shale, silica sand, iron ore, and clay are included on PTO 1128002.

Written records to demonstrate compliance with these limits, stockpile sizes and throughput limits shall be maintained on a monthly basis and made immediately available for District examination within 30 days of the annual inspection. (Rules 209 and 210.1, 210.3 and District Fugitive Dust Policy #95-02)

- cc. Any relaxation in this limit which increases your potential to emit above the applicable PSD threshold will require a full PSD review of the affected source as if construction had not yet commenced.

Emission Unit 002 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	002	Secondary Crushing & Ore Storage

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Secondary Crushing and Ore Storage, including following equipment:

- A. Limestone, shale, silica sand, iron ore, and alumina bearing materials (clay) storage areas (shared with PTO 1128001);
- B. Belt feeder (32-BF-01) B limestone;
- C. Vibratory feeder (32-VF-02) B limestone;
- D. Belt feeder (32-BF-03) B additives;
- E. Additive hopper (32-BN-02);
- F. Tunnel conveyor (32-BC-02) with discharge to belt conveyor 32-BC-07;
- G. Belt conveyor (32-BC-07) with discharge to belt conveyor (31-BC-03);
- H. Fabric collector (32-DC-05) with fan (32-FA-05) serving belt conveyor 32-BC-07;
- I. Fabric collector (32-DC-04) serving conveyor transfer point;
- J. Fabric collector (32-DC-06) with fan (32-FA-06) serving belt conveyor 31-BC-03;
- K. Belt conveyor (32-BC-06);
- L. Belt stacker (32-BS-02);
- M. Covered limestone storage;
- N. Covered iron ore storage;
- O. Conveyor to additive bins (32-BC-09); and
- P. Second conveyor to additive bins (34-BC-10).

**OPERATIONAL CONDITIONS:**

- 1. Dust suppressant or water shall be applied to outdoor silica and clay storage piles if visible emissions exceed 10% opacity. (Rule 210.1 BACT Requirement)
- 2. Shale storage shall only occur in shale storage building. (Rule 210.1)
- 3. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
- 4. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
- 5. Fabric collectors shall be in operation when crusher and conveyors are in operation. (Rule 210.1)
- 6. Material collected in dust collectors shall be disposed in manner preventing entrainment in atmosphere. (Rule 209)
- 7. Dust collectors shall have operational differential pressure indicators. (Rule 209)
- 8. Water and dust suppressant sprays shall be maintained to control dust emissions. (Rule 401)

Emission Unit 002 Permit Conditions

9. Sufficient moisture content shall be maintained such that visible emissions from all emission points shall be less than 5% opacity, except bulk storage which shall be less than 10% opacity. (Rule 210.1 BACT)
10. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)
11. Belt conveyors 32-BF-02 and vibratory feeder 32-VF-02 shall not operate whenever belt feeder 32-BF-03 is operating. (Rules 209 and 210.1)
12. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
13. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
14. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**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 (of PM<sub>10</sub>):**

Fabric Collector (32-DC-05):	0.011	gr/scf
	0.29	lb/hr
	7.01	lb/day
	1.28	ton/yr
Fabric Collector (32-DC-06):	0.011	gr/scf
	0.40	lb/hr
	9.50	lb/day
	1.73	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. (Rule 210.1)

Emission Unit 002 Permit Conditions

**SPECIAL CONDITIONS:**

- aa. All equipment shall be designed, installed and operated as described in application for Authority to Construct unless advance approval is granted for alternative.
- bb. Average stockpile size and fugitive dust emissions from storage, crushing, and handling shall not exceed the following:

<b>SOURCE</b>	<b>Size (acres)</b>	<b>Maximum Throughput (Tons/Year)</b>	<b>PM<sub>10</sub> Emissions (Tons/Year)</b>
Limestone B (secondary crusher & inside storage):	2.65	1	6.976
Iron Ore (A-pile)	0.1	1	0.159
Iron Ore (B-pile)	0.1	1	0.163
Shale	0.23	1	0.181
Silica sand	0.42	1	1.633
Alumina bearing materials (clay)	0.2	1	0.368
<b>TOTAL:</b>			<b>8.574</b>

<sup>1</sup>-Combined annual throughput of limestone, shale, sand, alumina bearing materials, and iron ore (see PTO 1128001) shall not exceed 1,927,872 tons per year. (Rules 209 and 210.1, and District Fugitive Dust Policy #95-02)

Written records to demonstrate compliance with these limits, stockpile sizes and throughput limits shall be maintained on a monthly basis and made immediately available for District examination within 30 days of the annual inspection. (Rules 209 and 210.1, 210.3 and District Fugitive Dust Policy #95-02)

- cc. Any relaxation in this limit which increases your potential to emit above the applicable PSD threshold will require a full PSD review of the affected source as if construction had not yet commenced.

Emission Unit 003 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	003	Raw Material Reclaiming, Grinding, & Storage

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Raw Material Reclaiming, Grinding & Storage, including following equipment:

- A. Reclaimer (34-RP-01);
- B. Belt conveyor (34-BC-07);
- C. Flop gate (34-FG-01) ventilated to item fabric collector 34-DC-05;
- D. Fabric collector (34-DC-05) serving flop gate (34-FG-01) and transfer point of belt conveyor 34-BC-07 to belt conveyor 34-BC-11 or belt conveyor 34-BC-08;
- E. Belt conveyor (34-BC-08) ventilated to fabric collector 34-DC-06;
- F. Belt conveyor 34-BC-11;
- G. One 3500 acfm 769 square feet fabric collector, 34-DC-06, serving belt conveyors 34-BC-09 at discharge end (item J), 34-BC-10 (item M) and 34-BC-13;
- H. Feed positioner (34-FP-01);
- I. Iron ore hopper;
- J. Belt conveyor (34-BC-12) to conveyor (34-BC-09) ventilated to fabric collector 34-DC-07;
- K. Fabric collector 34-DC-07 with fan 34-FA-07 serving transfer points 31-BC-04 to 34-BC-09;
- L. Feed positioner (34-FP-02);
- M. Belt conveyor (34-BC-10);
- N. Belt conveyor (34-BC-13);
- O. Iron ore storage silo (41-BN-01) ventilated to 41-DC-04;
- P. Weigh feeder (41-WF-05);
- Q. Limestone storage silo (41-BN-02) ventilated to 41-DC-04;
- R. Weigh feeder (41-WF-06)
- S. Silica storage silo (41-BN-03) ventilated to 41-DC-04;
- T. Weigh feeder (41-WF-07);
- U. Shale storage bin (41-BN-04) ventilated to 41-DC-04;
- V. Weigh feeder (41-WF-08);
- W. Fabric collector (41-DC-04) serving storage silos and bin;
- X. Belt conveyor (41-BC-04);
- Y. Fabric collector (41-DC-11) serving transfer points from weigh feeders to belt conveyor 41-BC-04;
- Z. Belt conveyor 41-BC-05;
- AA. Fabric collector (41-DC-09) with fan (41-FA-09) serving transfer points from belt conveyors 41-BC-04 or 41-BC-06 to belt conveyor 41-BC-05;
- BB. Flop gate (41-FG-01) for reject tramp metals;
- CC. 25 ton capacity roller mill surge bin (41-BN-05);
- DD. Belt feeder (41-BF-01);
- EE. Flop gate (41-FG-02) for reject tramp metals;

Emission Unit 003 Permit Conditions

- FF. Tramp metal bin (41-BN-06);
- GG. Roller mill (41-RM-01);
- HH. Dynamic separator (41-SP-02);
- II. Vibrating feeder for reject material (41-VF-01) with discharge to bucket elevator 41-BE-06;
- JJ. Bucket elevator (41-BE-06) with discharge to belt conveyor 41-BC-06;
- KK. Belt conveyor (41-BC-06) with discharge to belt conveyor 41-BC-05;
- LL. Fabric collector (41-DC-10) with fan (41-FA-10) serving bucket elevator BC-06, belt conveyor 41-BE-05, and surge bin 41-BN-05;
- MM. Air conveyor (42-AC-22) from kiln fabric collector 51-BH-02 hopper to bucket elevator 42-BE-04;
- NN. Bucket elevator 42-BE-04;
- OO. Air conveyor (42-AC-21) from bucket elevator 42-BE-04 to air conveyor 42-AC-20;
- PP. Air conveyor (42-AC-20) with distribution to storage silos 42-SL-01, >-02, and >-03;
- QQ. Fabric collector (51-DC-09 listed on permit 1128042) serving airslide 42-AC-20, air slide 42-AC-21, and blend silo 42-SL-03;
- RR. Distribution gate (42-GA-04) from screw pump 51-CX-01 to blend silos 42-SL-01 and 02 (backup to air conveyor system);
- SS. Fabric collector (42-DC-07) with fan (42-FA-07) serving dust pump 51-CX-01, airslide 42-AC-22, bucket elevator 42-BE-04, and screw conveyor 51-CX-01;
- TT. 100-ton spent catalyst storage silo (41-BN-08 – 3600-cubic feet);
- UU. Fabric collector (41-DC-08) serving spent catalyst storage silo with fan (41-FA-08) with 1500-scfm exhaust flow rate;
- VV. Rotary feeder (41-RF-08) and 1-hp motor; and
- WW. Material induction system including blower (41-BL-08) with 75-hp motor, inductor (41-IN-08) conveying material into roller mill separator (41-SP-02) and associated piping.
- XX. 190 ton additive storage bin (41-BN-09) ventilated to dust collector (41-DC-05);
- YY. Rotary bin extractor (41-RL-01);
- ZZ. Fabric collector (41-DC-05) serving additive storage bin with fan (41-FA-05);
- AAA. Weigh feeder (41-WF-09) with discharge to belt conveyor (41-BC-04);
- BBB. Reversible belt conveyor (34-BC-14) with discharge to additive bin (41-BN-09) or shale bin (41-BN-04);
- CCC. 1,000 ton processed limestone outdoor storage pile; and
- DDD. Hopper (54-BN-05) (shared with Permit No. 1128036) and associated piping for conveyance of processed limestone to mixing chamber.

**OPERATIONAL CONDITIONS:**

1. Outdoor processed limestone storage pile shall not exceed a footprint of 0.094 acres (Rule 210.1)
2. National Cement shall have provisions for wetting processed limestone storage pile and wetting processed limestone prior to unloading. (Rule 210.1 BACT Requirement)
3. Processed limestone shall not be added to the outdoor storage pile at a rate in excess of 100 tons per day or 30,000 tons per year (Rule 210.1)
4. Fabric collector 41-DC-08 shall be equipped with operational differential pressure indicator. (Rule 210.1)
5. Fabric collector 41-DC-08 shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
6. Particulate matter emissions from fabric collector 41-DC-08 exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)temperature. (Rule 210.1)

Emission Unit 003 Permit Conditions

7. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
8. Visible emissions from fabric collector 41-DC-08 serving spent catalyst storage silo shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
9. Maximum inlet dust collector (34-DC-06) temperature shall not exceed maximum continuous filter temperature. (Rule 210.1)
10. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, Subpart F)
11. Visible emissions from all emission points shall be less than 5% opacity except bulk storage, which shall be less than 10% opacity. (Rule 210.1 BACT)
12. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 210.1)
13. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
14. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
15. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)
16. All conveyors transporting dry material shall be covered, leak-tight, have no visible emissions. (Rule 210.1)
17. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
18. Equipment shall be maintained according to manufacturer's specifications. (Rules 209 and 210.1)
19. 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)
20. 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)
21. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
22. Stack test for fabric collector 41-DC-08 shall only be required if visible emissions exceed 5% opacity or ¼ Ringelmann 1 and District requires a stack test to show compliance with Rules 210.1 and 108.1. (Rule 108.1 and 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

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

## Emission Unit 003 Permit Conditions

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

<u>Fabric Collector (34-DC-05)</u> (@ 2,000-acfm)	0.01	gr/acf
	0.17	lb/hr
	4.11	lb/day
	0.75	tons/yr
Fabric Collector(34-DC-06) (@ 3,450-acfm)	0.01	gr/acf
	0.29	lb/hr
	7.01	lb/day
	1.28	tons/yr
Fabric Collector (34-DC-07) (@ 4,600-acfm)	0.011	gr/acf
	0.43	lb/hr
	10.41	lb/day
	1.90	tons/yr
Fabric Collector (41-DC-04) (@ 1,500-acfm)	0.01	gr/acf
	0.13	lb/hr
	1.54	lb/day
	0.28	tons/yr
Fabric Collector (41-DC-09) (@ 3,150-acfm)	0.011	gr/acf
	0.30	lb/hr
	7.13	lb/day
	1.30	tons/yr
Fabric Collector (41-DC-10) (@ 11,730-acfm)	0.011	gr/acf
	1.11	lb/hr
	26.53	lb/day
	4.84	tons/yr
Fabric Collector (41-DC-11) (@ 2,000-acfm)	0.011	gr/acf
	0.19	lb/hr
	4.53	lb/day
	0.83	tons/yr
Fabric Collector (42-DC-07) (@ 4,350-acfm)	0.011	gr/acf
	0.41	lb/hr
	9.84	lb/day
	1.80	tons/yr



Emission Unit 003 Permit Conditions

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

Spent catalyst fines Storage Silo	0.01	gr/scf (Rule 210.1 BACT Requirement)
(41-DC-08) Fabric Collector	0.13	lb/hr
(@ 1,500-scfm)	0.26	lb/day
	0.05	tons/yr
Fabric Collector (41-DC-05)	0.003	gr/acf
(@ 4,000-scfm)	0.10	lb/hr
	2.47	lb/day
	0.45	ton/yr
Processed Limestone Storage & Transfer		
(Unloading)	0.40	lb/day
	0.06	ton/yr
(Wind Erosion)	0.28	lb/day
	0.05	ton/yr
(Hopper 54-BN-05)	0.002	lb/day
	$2.4 \times 10^{-4}$	ton/yr

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

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

Emission Unit 005 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	005	Petroleum Coke Fuel System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Petroleum Coke Fuel System, including following equipment:

- A. Truck dump hopper (53-BN-01) ventilated to item E;
- B. Roll crusher (53-CR-01A, -01B, -01C and -01D), with four drive motors rated at 20 hp each;
- C. Storage silo with vent filter (53-SL-01);
- D. Two screw conveyors (53-SC-01 and 53-SC-02) and feed elevator (53-BE-01) ventilated to item E;
- E. Fabric collector (53-DC-06) serving receiving and storage;
- F. Two weigh feeders (south, 53-WF-01) and (north, 53-WF-02);
- G. Two C-E Raymond mills (south, 53-CM-01) and (north, 53-CM-02) with 53-CM-02 pneumatically conveyed to item H;
- H. 16,000 acfm fabric filter dust collector (53-DC-13) with pulse-jet cleaning mechanism, and fan (53-FA 13) receiving exhaust from #2 coke mill, item G;
- I. Pulverized coke bin #2 (53-BN-04) with integral 3,000 acfm fabric filter (53-DC-16);
- J. Calciner burner coke metering and conveying system;
- K. 16,000 acfm fabric filter dust collector (53-DC-14) serving coke mill #1;
- L. Screw conveyor (53-SC-06);
- M. Coke inductor (53-IN-02) and blower (53-BL-04);
- N. Pulverized coke bin #1 (53-BN-03) with integral 3,000 acfm fabric filter (53-DC-17);
- O. Kiln burner coke metering and conveying system (53-WF-03) including primary air fan 53-BL-02;
- P. Two coke mill 3.5mm Btu/hr booster heaters, Hauck 784 series, serving coke mill; and
- Q. Two (2) outdoor petroleum coke storage piles occupying 4.1-acres of storage area.

**OPERATIONAL CONDITIONS:**

- 1. Petroleum coke stored in outdoor pile shall be maintained at moisture content greater than or equal to 8%. (Rule 210.1 BACT requirement)
- 2. Mass of petroleum coke stored in outdoor piles shall not exceed 120,000-tons with a footprint not to exceed 4.1-acres. (Rule 210.1)
- 3. Opacity of stack emissions and storage piles shall not equal or exceed 5% or Ringelmann No. ¼. (Rule 210.1)
- 4. Roll crusher shall have no visible emissions. (Rule 210.1)
- 5. All conveyor transfer points and air slides shall be completely enclosed and ducted to operational dust collector. (Rule 210.1)
- 6. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)

Emission Unit 005 Permit Conditions

8. Fines collected in dust collectors shall be returned to process. (Rules 209 and 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. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
11. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
12. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

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

**EMISSION LIMITS:**

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

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

**Calciner Coke Feed Dust Collector (53-DC-13):**

(@ 16,000-acfm)

0.01	gr/acf
1.37	lb/hr
32.88	lb/day
6.00	tons/yr

**Kiln Coke Feed Dust Collector (53-DC-14):**

(@ 16,000-acfm)

0.005	gr/scf
0.65	lb/hr
15.67	lb/day
2.86	ton/year

**From Dust Collector (53-DC-06):**

(@ 3,045-acfm)

0.10	gr/scf –Rule 404.1
2.61	lb/hr
62.64	lb/day
11.43	ton/year

Emission Unit 005 Permit Conditions

**Pulverized Coke Bin #2 Dust Collector (53-DC-16):**

(@ 3,000-acfm) 0.0048 gr/scf  
0.12 lb/hr  
2.94 lb/day  
0.54 ton/year

**Pulverized Coke Bin #1 Dust Collector (53-DC-17):**

(@ 3,000-acfm) 0.0048 gr/scf  
0.12 lb/hr  
2.94 lb/day  
0.54 ton/year

**Outdoor Petroleum Coke Storage:**

10.69 lb/day-(average)  
1.82 ton/year

(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)

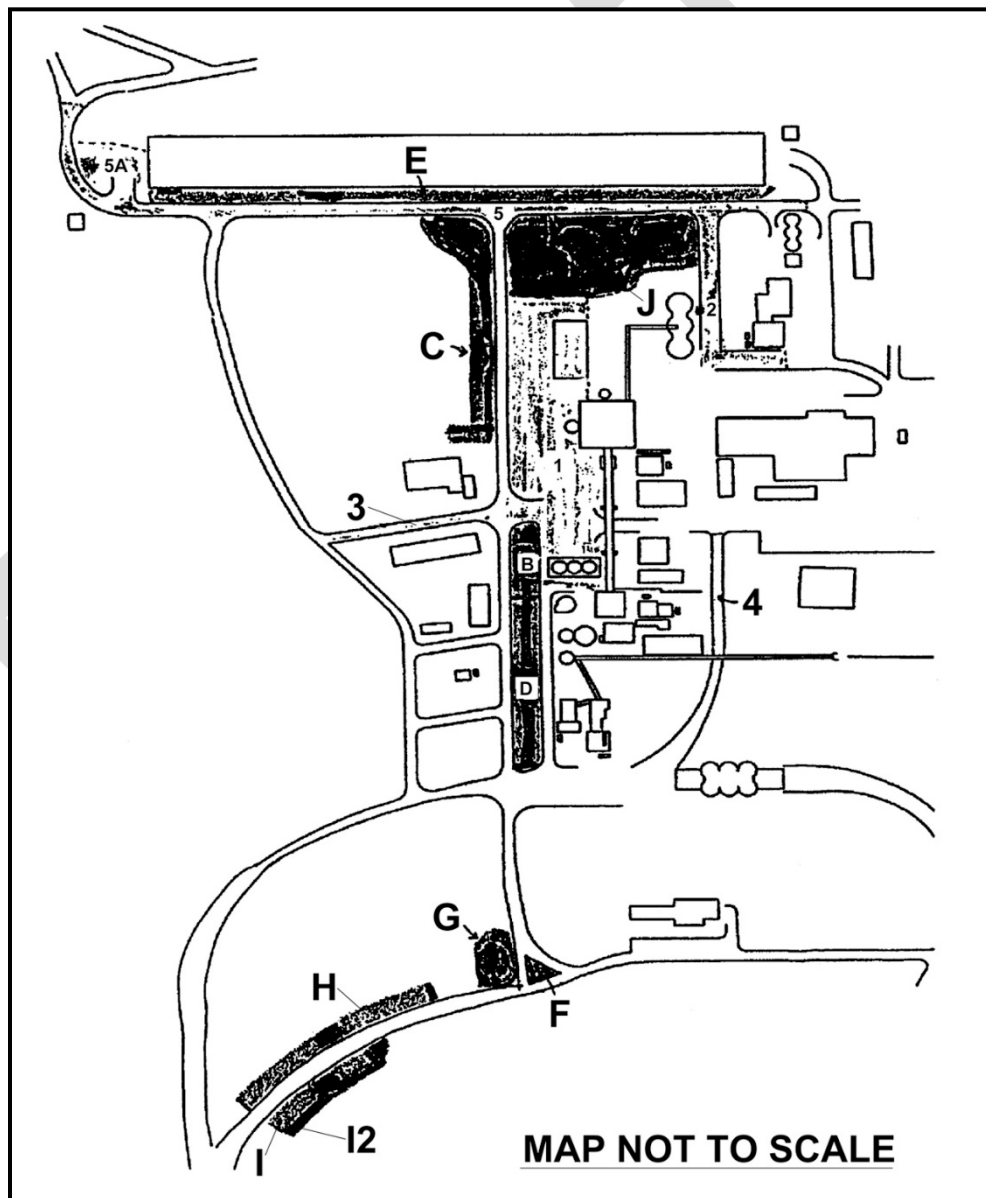
**SPECIAL CONDITIONS:**

- aa. Permittee shall maintain records of kiln operation. (Rules 209 and 210.1)
- bb. Permittee shall maintain clean and in good repair, 3.646 acres of paved roads and traffic areas as described below and on attached map. (Rule 210.1)

PAVED AREAS			
<u>Designation</u>	<u>Description</u>	<u>Dimensions</u>	<u>Acreage</u>
1	Area west of kiln	542 x 187	2.078
2	Road between raw mill and bend silos	434 x 37	0.369
3	Road between SCE station and motor shed	355 x 24	0.196
4	Road east of control room	170 x 18	0.070
5	Road south of limestone storage building	1081 x 25	0.620
5A	Area west of limestone storage building	135 x 101	0.313

- cc. Permittee shall maintain 3.284 acres of vegetative ground cover and 2.57 acres of grass as described below and on attached map. (Rule 210)

AREAS PLANTED WITH VEGETATION				
<u>Designation</u>	<u>Description</u>	<u>Vegetation</u>	<u>Dimensions</u>	<u>Acreage</u>
B	Bank west of coke dust collector	Ground cover	168 x 54	0.208
C	Bank east of laydown area	Ground cover	Irregular	0.507
D	Bank west of clinker silos/ finish mills	Ground cover	405 x 30	0.279
E	Bank south of limestone storage building	Ground cover	1037 x 40	0.976
F	Plant entrance (triangle)	Grass	143 x 91	0.149
G	Plant entrance east area	Grass	364 x 65	0.543
H	Plant entrance northwest patch	Grass	548 x 54	0.679
I and I2	Plant entrance southwest patch	Grass	320 x 81	1.199
J	Old baghouse area	Ground cover	225 x 270	1.314



National Cement Paving and Vegetation Areas

Emission Unit 006 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	006	Clinker Cooling & Storage System

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. Clinker cooler (52-CL-02) with 7 forced-draft cooling fans (52-FA-01 through 07) and hot air ducting to coke milling operations #1 and #2 (permit No. 1128005) ventilated to Rexnord gravel bed filter and roll-type clinker crusher;
- B. Gravel bed filter assembly (52-GF-01) with 10 filter modules, re-circulation duct, serving clinker cooler;
- C. Gravel bed filter hopper collecting screw conveyors (52-SC-01 and -02) and central duct screw conveyor (52-SC-03) with discharge to screw conveyor 52-SC-04;
- D. Screw conveyor (52-SC-04) with discharge to flop gate 52-FG-01;
- E. Flop gate (52-FG-01) with discharge to pan conveyor 62-DP-03 or screw conveyor 52-SC-05;
- F. Air to air heat exchanger (52-HX-01) with nine, 40 hp fans, 24 inch wide drag conveyor (52-CD-06) with 15 hp motor, and tipping valve (52-TV-25);
- G. Recirculation duct from gravel bed filter to clinker cooler, with clinker cooler vent fan (52-FA-08);
- H. Tertiary air duct taking hot air from clinker cooler to precalciner;
- I. Two drag conveyors (52-CD-01 and 52-CD-02);
- J. Screw conveyor (52-SC-05) with discharger to pan conveyor 61-DP-04;
- K. Pan conveyor (61-DP-04) with discharge to bucket elevator 61-BE-01;
- L. Bucket elevator (61-BE-01);
- M. Fabric collector (61-DC-06) with fan (61-FA-06) serving discharge of 61-DP-04 to 61-BE-01;
- N. Drag conveyors (61-CD-05 and 61-CD-06);
- O. Pan conveyor (62-DP-03) with discharge to flop gate 62-FG-03;
- P. Flop gate (62-FG-03) with discharge to belt conveyor 62-BC-02 or belt conveyor 62-BC-11;
- Q. Enclosed unloading hopper 62-BN-02, 30 tons capacity;
- R. Raw material feeder 62-BF-08;
- S. Fabric dust collector 62-DC-12, with fan 62-FA-12, 20,000 dscfm, serving the unloading hopper and material feeder;
- T. Flop gate 62-FG-05 to divert material to either the existing clinker building or to the new additives storage silos for finish mills FM1, FM2 and FM3 (PTOs # 1128007 and 1128036);
- U. Belt conveyor 62-BC-13 to transfer material to cement additive storage silos [71-SL-12, 71-SL-13 and 71-SL-14 (pending)], including scavenger chain drag 62-CD-07 to capture dust generated by material sticking to the belt and shaken loose at the return rollers;
- V. Fabric dust collector 62-DC-13, with fan 62-FA-13, 4500 dscfm, serving the discharge point of belt conveyor 62-BC-13;
- W. Flop gates 62-FG-06, -07 and -08 to divert the additive material to the storage silos 71-SL-12, -13 and -14 (finish mill #3, PTO #1128036); and belt conveyor 62-BC-04 to finish mill, PTO #1128007.
- X. Belt conveyor 62-BC-14, transferring material onto belt conveyor 62-BC-12;

Emission Unit 006 Permit Conditions

- Y. Fabric dust collector 62-DC-18, with fan 62-FA-18, 1500 dscfm, serving the discharge point of belt conveyor 62-BC-14 onto existing belt conveyor 62-BC-12;
- Z. Fabric dust collectors 62-DC-14, -15 and -16, with fans 62-FA-14, -15 and -16 (pending) respectively all 1,000 dscfm. The dust collectors vent silos 71-SL-12, -13 and -14 (PTO # 11280036);
- AA. Belt conveyor (62-BC-11) with discharge to belt conveyor 62-BC-12;
- BB. Fabric collector (62-DC-08) and fan (62-FA-08) (vented outdoors) serving belt conveyor 62-BC-11 and pan conveyor 62-DP-03;
- CC. Belt conveyor 62-BC-12 with discharge to belt stacker 62-BS-02;
- DD. Fabric collector (62-DC-06) and fan (62-FA-06) (vented outdoors) serving belt conveyor 62-BC-11 and '12;
- EE. Belt stacker (62-BS-02);
- FF. Hot clinker bucket conveyor 62DP03;
- GG. Flop gate to divert hot clinker flow from bucket conveyor 62DP03;
- HH. One 80' 75 hp bypass drag conveyor 62CD06;
- II. Partially enclosed 85,000 ton capacity clinker storage building;
- JJ. 1,000 ton capacity, 3 compartment clinker and gypsum storage silos (71-SL-01, '02, & '03);
- KK. Dust pump (52-CX-01) with discharge to clinker storage silo 71-SL-04 or silo 71-SL-07;
- LL. Fabric collector (61-DC-03) with fan (61-FA-03) serving clinker storage silo 71-SL-04;
- MM. Gypsum and clinker reclaimer with two booms (62-RP-01 and '02) with discharge to belt conveyor 62-BC-07;
- NN. Fabric filter dust collector providing clean air to reclaimer controls cab air conditioning unit;
- OO. Portable emergency reclaim drag conveyors (62-CD-04 and '05) with discharge to belt conveyor 62-BC-07;
- PP. Belt conveyor (62-BC-07) with discharge to flop gate 62-FG-02;
- QQ. Fabric collector (62-DC-05) with fan (62-FA-05) serving belt conveyor 62-BC-04 and transfer of belt conveyor 62-BC-07 to belt conveyor 62-BC-08 and 62-BC-10;
- RR. Flop gate (62-FG-02) with discharge to belt conveyor 62-BC-08 or belt conveyor 62-BC-10;
- SS. Belt conveyor (62-BC-08) with discharge to belt conveyor 62-BC-04;
- TT. Fabric collector (62-DC-04) with fan (62-FA-04) serving belt conveyors 62-BC-04 and 62-BC-08;
- UU. Belt conveyor (62-BC-10) with discharge to bucket elevator 62-BE-02;
- VV. Bucket elevator 62-BE-02 with discharge to drag conveyor 62-CD-06;
- WW. Drag conveyor (62-CD-06);
- XX. Belt conveyor (62-BC-04) with discharge to storage silos 71-SL-01 through '03;
- YY. Fabric dust collector (62-DC-18) with fan (62-FA-18), 1500 dscfm serving the discharge point of diverter gate 62-FG-07 on to existing belt conveyor 62-BC-04;
- ZZ. Three 3,000 ton capacity, three compartment clinker and gypsum storage silos (71-SL-05 through 07) ventilated by two fabric collectors (61-DC-04 and 61-DC-05); and
- AAA. One 6,000 ton capacity clinker storage silo (71-SL-04) ventilated by fabric collector (52-DC-02).

**OPERATIONAL CONDITIONS:**

1. Only dust collectors 62 DC-04 and 62 DC-05 shall vent outside clinker storage building. (Rule 210.1)
2. Clinker storage pile shall be partially enclosed with a wind barrier along one side. (Rule 210.1 BACT)
3. Wind barriers shall be located to protect storage pile from prevailing wind. (Rule 210.1 BACT)
4. Height of wind barrier shall be maintained at level sufficient to maintain a wind speed within storage building to 1 mile per hour or less. (Rule 210.1 BACT)

Emission Unit 006 Permit Conditions

5. Area of storage pile shall not exceed 5.0 acres. (Rule 210.1 BACT)
6. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
7. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
8. Fabric collectors shall be in operation when clinker cooler and conveyors are in operation. (Rule 210.1)
9. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
10. Visible emissions from all emission points shall be less than 5% opacity except bulk storage, which shall be less than 10% opacity. (Rule 210.1 BACT)
11. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)
12. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 209)
13. Clinker cooler shall exhaust to gravel bed filter and to precalciner (via tertiary air duct) with no exhaust point directly to atmosphere. (Rules 209 and 210.1)
14. All gravel bed filter exhaust gas shall be re-circulated; none shall be exhausted to atmosphere. (Rules 209 and 210.1)
15. Dust collectors shall have operational pressure differential indicators on each compartment. (Rule 209)
16. Visible emissions from equipment installed pursuant to Authority to Construct 1128006F shall be less than 5% opacity. (Rule 210.1 BACT)
17. Visible emissions from gypsum unloading and transfer operation shall be less than 5% opacity during normal operation. (Rule 210.1 BACT)
18. Conveyors shall be covered when in operation. (Rule 209)
19. Fines collected in dust collectors shall be returned to process. (Rule 210.1)
20. Fabric collector serving gypsum unloading, transfer, and storage operation shall begin operation prior to each unloading cycle and shall operate during entire cycle. (Rule 210.1)
21. Silt content (passing 200-mesh sieve) of clinker shall not exceed 6.4%. (Rule 210.1 BACT)
22. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
23. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
24. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

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

Fabric Collector (61-DC-03) (@ 9,972 acfm)	0.053 gr/scf 4.53 lb/hr 108.72 lb/day 19.84 ton/yr
Each Fabric Collector (61-DC-06 or 62-DC-08) (@4,000 acfm)	0.011 gr/scf 0.38 lb/hr 9.05 lb/day 1.65 ton/yr
Fabric Collector (62-DC-04) (@5,000 acfm)	0.01 gr/scf 0.43 lb/hr 10.30 lb/day 1.88 ton/yr
Fabric Collector (62-DC-05) (@7,500 acfm)	0.01 gr/scf 0.64 lb/hr 15.43 lb/day 2.82 ton/yr
Fabric Collector (62-DC-07) (@7,000 acfm)	0.01 gr/scf 0.66 lb/hr 15.84 lb/day 2.89 ton/yr
Fabric Collector (62-DC-06) (@ 3,500 acfm)	0.011 gr/scf 0.33 lb/hr 7.92 lb/day 1.45 ton/yr
Fabric Collector (62-DC-11) (@ 3,000 dscfm)	0.01 gr/scf 0.26 lb/hr 6.17 lb/day 1.13 ton/yr
Fabric Collector (62-DC-12) (@ 20,000 dscfm)	0.003 gr/scf 0.26 lb/hr 6.17 lb/day 1.13 ton/yr

## Emission Unit 006 Permit Conditions

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

Fabric Collector (62-DC-13) (@ 4,500 dscfm)	0.003	gr/scf
	0.03	lb/hr
	0.67	lb/day
	0.12	ton/yr
Fabric Collector (62-DC-14) (@ 1,000 dscfm)	0.003	gr/scf
	0.03	lb/hr
	0.67	lb/day
	0.12	ton/yr
Fabric Collector (62-DC-15) (@ 1,000 dscfm)	0.003	gr/scf
	0.03	lb/hr
	0.67	lb/day
	0.12	ton/yr
Fabric Collector (62-DC-16) (@ 1,000 dscfm)	0.003	gr/scf
	0.03	lb/hr
	0.67	lb/day
	0.12	ton/yr
Fabric Collector (62-DC-17) (@ 1,500 dscfm)	0.003	gr/scf
	0.002	lb/hr
	0.05	lb/day
	0.01	ton/yr

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

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

**SPECIAL CONDITIONS:**

- aa. All equipment shall be designed, installed and operated as described in application for Permit to Operate unless advance approval is granted for alternative.
- bb. Average stockpile size and fugitive dust emissions from clinker storage shall not exceed following:

Source	Stockpile Size (acres)	Maximum Throughput (Ton/Yr)	PM10 Emissions (Ton/Yr)
Clinker	5.0	1,000,000	4.58

Emission Unit 006 Permit Conditions

Written records to demonstrate compliance with these limits shall be maintained and made immediately available for District examination. (Rules 209 and 210.1, and District Fugitive Dust Policy #95-02)

- cc. Written records of average pile size shall be maintained on monthly basis for outside storage piles. (Rule 210.1)
- dd. This source is exempt from PSD review because of PM<sub>10</sub> emission reductions made from existing operations concurrently with new equipment installation. Any relaxation in this limit which increases your potential to emit above the applicable PSD threshold will require a full PSD review of the affected source as if construction had not yet commenced.
- ee. The owner or operator shall perform CARB Method 5 on fabric collector 62-DC-12, 62-DC-13 and 62-DC-17 to determine compliance with the BACT grain loading of 0.003 gr/scf no later than 60 days after startup. District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. Results shall be submitted to the District no later than 60 days within the test date. (Rules 108.1 and 210.1)

Emission Unit 007 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	007	Finish Mill #1 & Storage

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Finish Mill #1 with Cement Additive Handling and Storage Operation,  
including following equipment:

- A. N02500 separator (71-SP-01); 200 kilowatt AC Siemens variable speed drive;
- B. Outlet airflow - 88,000 acfm; Lubrication system (71-LU-12) with lubrication pump; Mechanical tipping valve for rejects (71-TV-08); Bleed air inlet damper (71-DA-03), 4 feed air gravity conveyors (71-AC-13 through 71-AC-16);
- C. Dust collector (71-DC-07) with a maximum rated airflow 120,000 acfm at 185<sup>0</sup> F; pulsejet type; 4:1 air to cloth ratio with polyester felt bags; 2 mechanical tipping valves; maximum pressure drop of 10 inches water column; Includes 2 air gravity conveyors (71-AC-17 and 71-AC-18) under dust collector hoppers;
- D. Fan (71-FA-07); Rated 120,000 acfm at 185<sup>0</sup> F 35 inches water column; Motor 900 Hp including inlet damper (71-DA-02);
- E. Air gravity conveyor (71-AC-02) from new dust collector to existing air conveyor (71-AC-08);
- F. Ductwork from O-Sepa to dust collector; 68 inches diameter;
- G. Ductwork from dust collector to O-Sepa fan; 119" by 38";
- H. Ductwork from O-Sepa fan exhausting to atmosphere; 90" by 36";
- I. Auxiliary venting ducting designed for 3,500 fpm velocities venting to 71-DC-01;
- J. Air compressor (71-CP-03);
- K. Air dryer (71-AD-02);
- L. Cement mill duty bucket elevator (71-BE-03) with 20 hp motor ventilated by 8" diameter duct @ 1,500 cfm, to cooler (71-CC-03);
- M. Fuller cement cooler (71-CC-03), 6 ft.6" diameter by 16 ft. high ventilated by 8" diameter duct @ 1,400 cfm;
- N. Industrial Filter, Model AA11511-10, dust collector (71-DC-06) 160 - 5 inch by 10 inch.
- O. Bags with 60 hp fan motor serving 71-BE-03 and 71-CC-03 and following equipment: Screw conveyor (71-SC-09) ventilated by 18" diameter duct @ 2,000 cfm and mill B-2 (71-BM-02);
- P. Dust collector (71-DC-04) 307 - 5" by 10 ft. bags with 60 hp fan motor serving 71-BM-01 and 71-SP-02 and following equipment:
- Q. Air slide (71-AC-01), ventilated by 8" diameter duct @ 1,300 cfm and elevator (71-BE-01) ventilated by 10" diameter duct @ 200 cfm;
- R. Three cement coolers (71-CC-01, 71-CC-02, and 71-CC-04) each ventilated by one 8" diameter duct @ 1,300 cfm each; and
- S. Feed screw (71-SC-09) ventilated by 12" diameter duct @ 2,500 cfm and elevator (71-BE-02) ventilated by 10" diameter duct @ 2,500 cfm;
- T. Tunnel conveyor (62-BC-04), shared with PTO 1128006;
- U. Three finish mill feed silos (71-SL-01 through 71-SL-03) ventilated to 62-DC-09;

Emission Unit 007 Permit Conditions

- V. Add piping and booster blower to transfer material pneumatically from delivery trucks to silos 71-SL-07. Existing dust collector 61-DC-05 presently serves these silos and its capacity is adequate to vent the silos during pneumatic transfer (new)
- W. Fabric collector (71-DC-03) serving ball mill feed conveyor and weigh feeders;
- X. Seven weigh feeders (71-WF-01 through 71-WF-07);
- Y. Ball mill feed conveyor (71-BC-01) ventilated to 71-DC-02;
- Z. Dust collecting metal hopper with scavenger screw (pending);
- AA. Fabric collector (71-DC-02) serving ball mill feed conveyor (71-BC-01) and weigh feeders;
- BB. Feed belt (71-BC-01) ventilated by 12" diameter duct @ 2,500 cfm;
- CC. Fuller B-1 ball mill (71-BM-01) ventilated to 71-DC-04;
- DD. Air separator (71-SP-02) ventilated to 71-DC-04;
- EE. Fabric collector (71-DC-01) serving O-Sepa Separator;
- FF. Two air conveyors (71-AC-05 and 71-AC-11);
- GG. Air conveyor (71-AC-06);
- HH. Two air conveyors (71-AC-19 and 71-AC-20);
- II. Two cement pumps (71-FK-01 and 71-CX-01) each ventilated by one 6" diameter duct @ 1,000 cfm each and vented to O-Sepa Separator (71-SP-01);
- JJ. Pulse Jet fabric collector 71-DC-16 with 25 bags (265 square feet), 1250 acfm serving transfer point between weighfeeder 1 (71-WF-01) and belt conveyor (71-BC-01);
- KK. Pulse Jet fabric collector 71-DC-17 with 25 bags (265 square feet), 1250 acfm serving transfer point between weighfeeder 2 (71-WF-02) and belt conveyor (71-BC-01); and
- LL. Pulse Jet fabric collector 71-DC-18 with 25 bags (265 square feet), 1250 acfm serving transfer point between weighfeeder 4 (71-WF-04) and belt conveyor (71-BC-01).

**OPERATIONAL CONDITIONS:**

1. Exhaust stack shall be equipped with adequate provisions facilitating collection of samples consistent with EPA test methods, i.e. capped sample port in accessible location of uniform flow. (Rule 108.1)
2. Dust collector shall be equipped with operational pressure differential indicator. (Rule 209)
3. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
4. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
5. Visible emissions from all emission points, unless specified, shall not exhibit or exceed 10% opacity. (Rule 422, 40 CFR Part F)
6. All piping, ducting, and connections shall be leak-tight and shall have no visible emissions. (Rule 210.1)
7. There shall be no visible emissions from fabric collectors 71-DC-16, '-17, and '-18. (Rule 210.1 BACT Requirement)
8. Conveyors shall be covered when in operation. (Rule 210.1)
9. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
10. Equipment shall be maintained according to manufacturer's specifications. (Rules 210.1 and 209)
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)

Emission Unit 007 Permit Conditions

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)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector emission limitations shall be verified, within 60 days of District request. (Rule 108.1)

**EMISSION LIMITS:**

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

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

Fabric Collector (71-DC-01) (@ 23,000 acfm)	0.013	gr/scf
	2.54	lb/hr
	60.34	lb/day
	11.01	ton/yr
Fabric Collector (71-DC-02) (@ 4,800 acfm)	0.013	gr/scf
	0.52	lb/hr
	12.59	lb/day
	2.30	ton/yr
Fabric Collector (71-DC-03) (@ 3,500 acfm)	0.013	gr/scf
	0.38	lb/hr
	9.18	lb/day
	1.68	ton/yr
Fabric Collector (71-DC-04) (@ 17,000 acfm)	0.013	gr/scf
	1.86	lb/hr
	44.60	lb/day
	8.14	ton/yr
Fabric Collector (71-DC-06) (@ 12,000 acfm)	0.013	gr/scf
	1.31	lb/hr
	31.48	lb/day
	5.75	ton/yr
Fabric Collector (71-DC-07) (@ 120,000 acfm)	0.011	gr/scf
	11.70	lb/hr
	280.88	lb/day
	51.26	ton/yr

Emission Unit 007 Permit Conditions

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

Fabric Collector (71-DC-16)	0.01	gr/scf
(@ 1,250 acfm)	0.47	lb/hr
	11.31	lb/day
	2.06	ton/yr

Fabric Collector (71-DC-17)	0.01	gr/scf
(@ 1,250 acfm)	0.47	lb/hr
	11.31	lb/day
	2.06	ton/yr

Fabric Collector (71-DC-18)	0.01	gr/scf
(@ 1,250 acfm)	0.47	lb/hr
	11.31	lb/day
	2.06	ton/yr

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

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

**SPECIAL CONDITION:**

National Cement shall provide District with a written notification of any CARB PERP equipment operation according to notification requirements listed on the permit. National Cement shall maintain records of all CARB PERP permits for five years and no CARB PERP equipment shall be operated in a manner consistent with a stationary application, i.e. routine and predictable, without prior District approval.

Emission Unit 008 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	008	Finish Mill #2

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Finish Mill #2, including following equipment:

- A. Two screw conveyors (71-SC-12 and 71-SC-11);
- B. B-2 ball mill (71-BM-02) ventilated to item C;
- C. Fabric collector (71-DC-06) serving items B and F;
- D. Screw conveyor (71-SC-09);
- E. Two elevators (71-BE-03 and 71-BE-02) (shared with PTO 1128007);
- F. Cement cooler (71-CC-03) ventilated to fabric collector (71-DC-06); and
- G. Three air conveyors and air separator (shared with PTO 1128007) items L, M, and N.

**OPERATIONAL CONDITIONS:**

- 1. Particulate matter emissions from any single source operation shall be no more than 0.2-gr/scf. (Rule 404.1)
- 2. Visible emissions from any single emission point shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 3. Material collected in dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)
- 4. Collectors shall have operational differential pressure indicators. (Rule 209)



Emission Unit 009 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	009	Gypsum Truck Off-Loading Operation

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Gypsum Truck Off-Loading Operation, including following equipment:

- A. Gypsum receiving hopper (62-BN-01);
- B. Covered belt conveyor (62-BC-05) with enclosed transfer point to gypsum stacker;
- C. Covered gypsum storage area;
- D. Fabric dust collector (62-DC-03) with 2,000-acfm fan (62-FA-03); and
- E. Outdoor Gypsum Storage Pile.

**DESIGN CONDITIONS:**

- a. Outdoor gypsum storage pile shall not exceed a 0.7-acre footprint. (Rule 210.1)
- b. Dust suppressant or water shall be applied to outdoor gypsum storage pile if visible emissions exceed 10% opacity. (Rule 210.1 BACT Requirement)

**OPERATIONAL CONDITIONS:**

1. Dust collector shall be equipped with operational pressure differential indicator. (Rule 209)
2. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
3. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
4. Fabric dust collector shall be in operation when equipment is operated. (Rule 210.1)
5. Particulate matter emissions discharged into atmosphere shall be no more than 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
6. Visible emissions from equipment shall be less than 5% opacity or Ringelmann No. 1/4 except for not more than three minutes in any one hour. (Rule 210.1 BACT)
7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 009 Permit Conditions

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from fabric dust collector unit shall not exceed following limits:

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

**Fabric Collector 62-DC-03:**

0.10 gr/scf  
1.71 lb/hr  
13.71 lb/day  
2.50 ton/yr

**Outdoor Gypsum Storage:**

3.52 lb/hr  
0.64 ton/yr

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

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

Emission Unit 010 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	010	Cement Storage & Shipping

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Cement Storage & Shipping, including following equipment:

- A. Bucket elevator (81-BE-01) with discharge to air conveyor 81-AC-45 ventilated by fabric collector 71-DC-08;
- B. Air conveyor (81-AC-45) with discharge to air conveyor 81-AC-23;
- C. Air conveyor (81-AC-23) with discharge to bucket elevator 81-BE-02;
- D. Alleviator (81-AL-01) with discharge to bucket elevator 81-BE-02;
- E. Bucket elevator (81-BE-02) with discharge to air conveyor 81-AC-24;
- F. Twelve air conveyors (81-AC-01 through 81-AC-08, 81-AC-12, 81-AC-14, 81-AC-15, and 81-AC-18);
- G. Ten air conveyors (81-AC-24 through 81-AC-31, 81-AC-40, and 81-AC-41) with diverter gates (81-DG-01 through 09) with discharges to storage silos;
- H. Eight concrete storage silos (81-SL-01 through 81-SL-08) ventilated to fabric collectors 81-DC-06 and 81-DC-07;
- I. Manually operated slide gate (81-SG-10);
- J. Rotary feeder (81-RF-01);
- K. One 7-ton holding bin (81-BN-02);
- L. One 250 hp, 4500 acfm, air blower for conveying material;
- M. Inductor (81-IN-01) to mix air from blower 81-BL-21 and cement from rotary feeder 81-RF-02;
- N. One 3hp, 779 square feet, 450 dscfm dust collector (81-DC-18) with fan (81-FA-18) serving holding bin 81-BN-02;
- O. One 7-ton alleviator used to pneumatically convey cement and equipped with discharge rotary feeder;
- P. One 3hp, 779 square feet, 450 dscfm dust collector (81-DC-19) with fan (81-FA-19) serving holding alleviator 81-AL-01;
- Q. Two concrete storage silos (81-SL-09 through 81-SL-10) with aerated bin bottoms (81-AC-38 d 39), lump breakers (81-LB-09, '-10, '-11, and '-12) and rotary feeders (81-RV-16, '-19, '-22, and '-25) ventilated to fabric collector 81-DC-09;
- R. Four Midwest unloaders (81-MS-01 through 81-MS-04) ventilated to fabric collectors 81-DC-01 through 81-DC-04;
- S. Four Mikro-Pulsaire fabric collectors (81-DC-01 through 81-DC-04) serving four Midwest unloaders;
- T. I.C.A. fabric collector (81-DC-06) serving silos (81-SL-03, 81-SL-08, 81-SL-04, and 81-SL-06);
- U. Fuller fabric collector (81-DC-07) serving silos (81-SL-01, 81-SL-02, 81-SL-05, and 81-SL-07);
- V. Fabric collector (81-DC-09) with fan (81-FA-09) and screw conveyor (81-SC-01 with discharge to silo 81-SL-10 serving silos (81-SL-09 and 81-SL-10, alleviator 81-AL-01, air conveyors 81-AC-23 and 81-AC-37, and bucket elevator 81-BE-02;
- W. Air conveyors (81-AC-32, '-33, '-34, and '-35) from silos 81-SL-09 and '-10 with spitzer traps (81-ST-09, '-10, '-11 and '-12) and discharge to loading spouts;

Emission Unit 010 Permit Conditions

- X. Four truck loading spouts (81-MS-05 through ‘-08);
- Y. Four fabric collectors (81-DC-10 through ‘-13) with fans (81-FA-10 through 13) serving loading spouts 81-MS-05 through ‘-08;
- Z. Air conveyors (81-AC-36 and ‘-37) from the discharge of silos 81-SL-09 and ‘-10 to mixing box 81-MB-01;
- AA. Mixing box (81MB-01);
- BB. Fabric Collector (81-DC-17) with pulse jet cleaning mechanism; and
- CC. Fan (81-FA-17) for Fabric Collector (81-DC-17).

**OPERATIONAL CONDITIONS:**

1. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U.S. EPA test methods. (Rule 210.1)
2. Particulate matter emissions from any single source operation shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Fabric collectors shall be in operation when silos and conveyors are in operation. (Rule 210.1)
4. Visible emissions from all emission points shall be less than 5% opacity. (Rule 210.1 BACT Requirement)
5. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rule 210.1 BACT Requirement)
6. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 210.1)
7. Dust collectors shall have operational pressure differential indicators on each compartment. (Rule 210.1)
8. Conveyors shall be covered when in operation. (Rule 210.1)
9. Fines collected in dust collectors shall be returned to process. (Rule 210.1)
10. Fabric collectors serving cement storage & shipping operation shall operate whenever associated transfer and loading equipment is in operation. (Rule 210.1)
11. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 210.1)
12. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, 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)

Emission Unit 010 Permit Conditions

**EMISSION LIMITS:**

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

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

Each Fabric Collector (81-DC-10, 81-DC-11, 81-DC-12 and 81-DC-13):	0.011 grains/scf 0.29 lb/hr 7.01 lb/day 1.28 ton/yr
Fabric Collector (81-DC-06):	0.011 grains/scf 0.47 lb/hr 11.31 lb/day 2.06 ton/yr
Fabric Collector (81-DC-07):	0.011 grains/scf 1.89 lb/hr 45.26 lb/day 8.26 ton/yr
Fabric Collector (81-DC-09):	0.011 grains/scf 1.13 lb/hr 27.15 lb/day 4.96 ton/yr
Fabric Collector (81-DC-17):	0.011 grains/scf 0.47 lb/hr 11.31 lb/day 2.06 ton/yr
Fabric Collector (81-DC-18):	0.02 grains/scf 0.08 lb/hr 2.08 lb/day
Fabric Collector (81-DC-19):	0.02 grains/scf 0.08 lb/hr 2.08 lb/day
Fabric Collector (81-DC-18 and 19): (Combined emissions)	0.52 ton/yr

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

Emission Unit 017 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	017	<u>Quarry Operation</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. Multiple separate mining sites;
- B. Blast hole drill with dust collector and water spray;
- C. Front end loaders for loading shot rock into haul trucks;
- D. Haul trucks; and
- E. Water truck for haul road dust suppression.

**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. Water trucks shall be utilized to minimize dust from blasting, loading, and haul areas. (Rule 210.1)
- 3. Equipment shall be maintained as per manufacturer's recommendations. (Rule 210.1)
- 4. Material collected in fabric collector shall be disposed in manner preventing entrainment in atmosphere. (Rule 210.1)

**COMPLIANCE TESTING REQUIREMENTS:**

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

Emission Unit 018 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	018	<u>Gasoline Storage &amp; Dispensing System</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. 3,000-gallon Petro-Vault regular unleaded aboveground storage tank (AST) with a permanently affixed fill tube termination no more than six inches from bottom of tank and provisions for collection of gasoline vapors during filling (ATC No. 1128018C)
- B. Phase I (filling of storage tank) vapor recovery system (Executive Orders: VR-402-E & G-70-130-A) including the following CARB certified components:

**Component**

- 1. Liquid Fill Adaptor
- 2. Liquid Fill Cap
- 3. Vapor Adapter
- 4. Vapor Cap
- 5. Drop Tube
- 6. Drop Tube Overfill Protection
- 7. Pressure Vacuum Relief Valve
- 8. Emergency Vent

- C. Balance Type Phase II (fueling of vehicle tank) EVR vapor collection system (Executive Order: G-70-130-A) including the following CARB certified components:

**Component**

- 1. Nozzle
- 2. Vapor Check Valve
- 3. Coaxial Hose
- 4. Overhead Hose Retractor
- 5. Dispenser

**OPERATIONAL CONDITIONS:**

- 1. Gasoline throughput shall not exceed 36,000 gallons per year without prior District approval. (Rule 210.1)
- 2. Storage/dispensing facility shall be equipped with California Air Resources Board certified Phase I (filling of storage tanks) and Phase II (refueling of motor vehicles) vapor collection systems. (Rules 412 and 412.1)

Emission Unit 018 Permit Conditions

3. Vapor control system shall be of California Air Resources Board (CARB) certified design. Manufacturers recommendations for installation, operation, and maintenance shall be followed to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 412 and 412.1)
4. 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 tagged out of service upon detection. (Rules 412 and 412.1)
5. General exterior of tank shall be white in color. (Rule 412)
6. Tank shall be equipped with pressure-vacuum valve set to within 10% of maximum allowable working pressure of tank. (Rule 412)
7. Tank shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
8. All Phase I (filling of storage tank) vapor collection equipment shall be used when tank is filled. (Rule 412)
9. No gasoline delivery vessel shall be operated or be allowed to operate unless valid State of California decals are displayed on the cargo tank which attests to the vapor integrity of the tank. (Rule 412)
10. Gasoline flow through any nozzle shall not exceed 10 gallons per minute. (Rule 412.1)
11. Vapor recovery systems and gasoline dispensing equipment shall be maintained leak-free. A "leak" is defined as the dripping of liquid volatile organic compounds at a rate of three or more drops per minute, or vapor volatile organic compounds in excess of 10,000-ppm as equivalent methane as determined by EPA Test Method 21. (Rule 412.1)
12. No person shall tamper with or permit tampering with a CARB-Certified Phase-II vapor recovery system in any way which could impair collection and/or disposal of gasoline vapors. (Rule 412.1)
13. Gasoline storage and dispensing equipment used to comply with provisions of this Rule shall comply with all applicable codes and regulations, including safety, fire, weights and measures, etc. (Rule 412.1)
14. The permittee shall perform and pass within 60 days of startup and at least once every 3 years a Static Pressure Performance of Vapor Recovery Systems at Gasoline Dispensing Facilities with Aboveground Storage Tanks, as described in Exhibit 6 of CARB Executive Order VR-402-E. (Rule 412)
15. CARB Certified Phase-II vapor recovery system shall be checked for leaks in accordance with test procedures described in Executive Order G-70-130-A. (Rule 412.1)
16. Records verifying compliance with CARB Certified Phase-II Vapor Recovery System testing requirements shall be maintained by permittee. Test results shall be dated and contain names, addresses, and telephone numbers of person(s) responsible for system installation and testing. (Rule 412.1)
17. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC §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)



Emission Unit 018 Permit Conditions

**EMISSION LIMITS:**

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

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

0.01	lb/hr
0.23	lb/day
0.04	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 recordkeeping 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 210.1)

**SPECIAL CONDITIONS:**

- aa. Equipment shall be installed and operated as described in California Air Resources Board Executive Order VR-402-E and G-70-130-A. (Rule 210.1)
- bb. System and components shall be of California Air Resources Board certified design, any component changes shall be approved in advance by District. (Rule 412)

Emission Unit 025 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	025	<u>Emergency Use Piston Engine with Generator Set</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. 395-kW Caterpillar generator, Model SR4, driven by 400-bhp Caterpillar, Model 3412, uncertified diesel fueled piston engine with turbocharger and after cooler. (S/N M58BH3040).
- B. Western Global, Model 20TCG, (500-gal) R99 Renewable diesel storage tank equipped with pressure/vacuum vent valve.

**OPERATIONAL CONDITIONS:**

1. Engine shall be equipped with turbocharger and charge air cooler. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
3. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)
4. Biodiesel storage tank shall be painted white. (Rule 210.1 BACT Requirement)
5. Biodiesel storage tank shall be equipped with pressure/vacuum relief valve set to within 10% of maximum working pressure of tank. (Rule 210.1 BACT Requirement)
6. Total hours of operation (excluding maintenance and testing) shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
7. Engine visible emissions shall be less than 5% opacity or Ringelmann No. ¼ during normal operation, except for not more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
8. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel or renewable diesel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
9. The operator shall maintain annual diesel throughput records. (Rule 410)
10. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
11. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rules 209 and 210.1)
12. 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)
13. Engine shall comply with the requirements of California Code of Regulations (CCR), Title 17, Section 93115 (Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engine). (CCR Title 17, Sections 93115 – 93115.15)

Emission Unit 025 Permit Conditions

14. Maintenance and testing shall be limited to no greater than 20 hours per year. (CCR Section 93115)
15. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
16. Operating record of this equipment shall be maintained in format approved in writing by District kept for a minimum of three years and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, hours of operation for emergency use, hours of operation for maintenance and testing, hours of operation for all uses other than those specified in sections 93115.10(f)(1)(A) through (D), amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine maintenance check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1).
17. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine 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 emission unit shall not exceed following limits:

<b><u>Particulate Matter (PM<sub>10</sub>):</u></b>	0.25 gm/bhp-hr (ATCM standard)
	0.22 lb/hr
	5.29 lb/day
	0.02 ton/yr

<b><u>Sulfur Oxides (SO<sub>x</sub> as SO<sub>2</sub>):</u></b>	4E-3 lb/hr
	0.11 lb/day
	4E-4 ton/yr

<b><u>Oxides of Nitrogen (NO<sub>x</sub> as NO<sub>2</sub>):</u></b>	7.50 gm/bhp-hr (ATCM standard)
	6.61 lb/hr
	158.73 lb/day
	0.66 ton/yr

<b><u>Volatile Organic Compounds (VOC):</u></b>	0.04 gm/bhp-hr (ATCM standard)
<b>(as defined in Rule 210.1)</b>	0.04 lb/hr
	0.85 lb/day
	4E-3 ton/yr

Emission Unit 025 Permit Conditions

**Carbon Monoxide:**

1.10	gm/bhp-hr (ATCM standard)
0.97	lb/hr
23.28	lb/day
0.10	ton/yr

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

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

Emission Unit 026 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	026	<u>Emergency Use Piston Engine with Generator Set</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

One 99 bhp emergency use Tier 3 diesel fueled piston engine equipped with a Miratech LTRV2-2-2.5-XR1 diesel particulate filter (DPF)

**OPERATIONAL CONDITIONS:**

1. Engine shall be equipped with turbocharger and Miratech DPF. (Rule 210.1 BACT Requirement)
2. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
3. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)
4. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
5. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
6. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not be more than 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
7. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
8. The engine shall comply with the requirements specified in the ATCM for new stationary emergency standby diesel-fueled engines. (Title 17, CCR Section 93115 - 93115.15)
9. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
10. Operating record of this equipment shall be maintained in format approved in writing by District kept for a minimum of five years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1)
11. 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)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance, to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC Section 41700)

Emission Unit 026 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)

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

<b><u>Particulate Matter (PM<sub>10</sub>):</u></b>	0.03	g/bhp-hr (Rule 210.1 BACT Requirement)
	0.007	lb/hr
	0.16	lb/day
	0.001	ton/year
<b><u>Oxides of Sulfur (SO<sub>x</sub> as SO<sub>2</sub>):</u></b>	0.001	lb/hr
	0.03	lb/day
	0.000	ton/year
<b><u>Oxides of Nitrogen (NO<sub>x</sub>):</u></b>	3.3	g/bhp-hr (ATCM Requirement)
	0.73	lb/hr
	17.42	lb/day
	0.07	ton/year
<b><u>Volatile Organic Compounds (VOC):</u></b> (as defined in District Rule 210.1)	0.2	g/bhp-hr (ATCM Requirement)
	0.04	lb/hr
	0.92	lb/day
	0.004	ton/year
<b><u>Carbon Monoxide (CO):</u></b>	3.7	g/bhp-hr (ATCM Requirement)
	0.81	lb/hr
	19.38	lb/day
	0.08	ton/year

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

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

Emission Unit 028 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	028	<u>Truck-Mounted Vacuum #90707</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Truck-Mounted Vacuum #90707, including following equipment:

- A. One vehicle chassis;
- B. One 125 hp electric motor to drive blower and one small gasoline engine to operate hydraulic system;  
and
- C. Vacuum system with 4,500 cfm blower and 108 bag dust collector.

**OPERATIONAL CONDITIONS:**

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

Emission Unit 033 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	033	<u>Vacuum Type Fugitive Dust Yard Sweeper</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Vacuum Type Fugitive Dust Yard Sweeper, including following equipment:

- A. Cylindrical broom sweeper;
- B. Auxiliary sidebrushes,;
- C. Detachable vacuum wand;
- D. Stainless steel hopper;
- E. Two high vacuum fans;
- F. Fabric filter with filter screens; and
- G. Hydraulic shaker filter cleaner.

**OPERATIONAL CONDITIONS:**

- 1. Dust collector shall be equipped with operational pressure differential indicator. (Rule 209)
- 2. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
- 3. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
- 4. Fabric dust collector on sweeper unit shall be in operation when equipment is operated. (Rule 210.1)
- 5. Particulate matter emissions discharged into atmosphere shall be no more than 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
- 6. Visible emissions from equipment shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
- 7. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**EMISSION LIMITS:**

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

Particulate Matter:      0.10 grains/dscf (of PM) (Rule 404.1)  
                                 1.37 lbm/hr (of PM10)  
                                 10.97 lbm/day (of PM10)  
                                 2.00 ton/yr (of PM10)



Emission Unit 033 Permit Conditions

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

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

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Emission Unit 034 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	034	<u>Synthetic Gypsum Receiving &amp; Storage</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Synthetic Gypsum Receiving & Storage, including following equipment:

- A. Synthetic gypsum receiving hopper;
- B. One 40 hp blower;
- C. Dust pump (52-CX-01) with discharge to clinker storage silo 71-SL-04 or 71-SL-07 (1128006);
- D. Synthetic gypsum storage silo (compartment) (71-SL-07); and
- E. Fabric collector (61-DC-05).

**OPERATIONAL CONDITIONS:**

- 1. Visible emissions from synthetic gypsum unloading and transfer operation shall be no more than 10% opacity. (Rule 422)
- 2. Fabric collector serving synthetic gypsum operation shall be in operation whenever material is being transferred into storage silo. (Rule 209)
- 3. Collected fines shall be disposed of in manner preventing entrainment in atmosphere. (Rule 209)

Emission Unit 035 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	035	<u>Truck-Mounted Vacuum</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. Truck with 355 hp engine (permit exempt); and
- B. Vacuum unit including 5,200 cfm vacuum blower, 4 centrifugal separators and baghouse with reverse pulse cleaning mechanism.

**OPERATIONAL CONDITIONS:**

- 1. Vacuum unit exhaust particulate matter (PM10) concentration shall be no more than 0.02 gr/dscf. (Rule 210.1 BACT Requirement)
- 2. Baghouse shall be equipped with reverse pulse cleaning mechanism and operational pressure differential indicator. (Rule 209)
- 3. Visible emissions from vacuum unit exhaust shall be no more than 5% opacity or Ringelmann No. 3. (Rule 210.1 BACT Requirement)
- 4. Baghouse shall be in operation when vacuum unit is operated. (Rule 210.1)
- 5. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
- 6. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. Baghouse components and hoses shall be maintained on regular basis to prevent excessive emissions. (Rules 209 and 210.1)
- 7. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rules 209 and 210.1)
- 8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**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 035 Permit Conditions

**EMISSION LIMITS:**

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

Particulate Matter (of PM10):      0.02 grains/dscf  
   21.39 lbm/day  
   3.90 ton/yr

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

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

Emission Unit 036 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	036	<u>Cement Finish Mill #3</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Cement Finish Mill #3, including following equipment:

- A. 100 ton capacity gypsum storage silo (71-SL-08) with weigh feeder (71-WF-08);
- B. Two 300 ton capacity clinker storage silos (71-SL-09 & '-10) with weigh feeders (71-WF-08 & '-10);
- C. 100 hp, 1000 acfm blower (71-BL-15) used to transfer material from delivery trucks to storage silo (71-SL-11);
- D. 150 ton capacity synthetic gypsum storage silo (71-SL-11) vented to fabric collector 71-DC-21;
- E. Synthetic gypsum weighfeeder (71-WF-11) and screw conveyor (71-SC-20), transferring material from storage silo (71-SL-11) to existing belt conveyor (71-BC-12) and vented to existing dust collector (71-DC-21);
- F. Synthetic gypsum weighfeeder (71-WF-11) transferring material from belt conveyor (72BC-12) and vented to dust collector (71-DC-13);
- G. Ball mill feed belt conveyor (71-BC-12);
- H. Fabric collector (62-DC-07) with fan (62-FA-07) serving storage silo 71-SL-08, '-09, & '-10, bucket elevator 62-BE-02 and weigh feeders (71-WF-08 '09 & -10);
- I. Ball mill (71-BM-03);
- J. Static separator (71-SP-04);
- K. Mill discharge air conveyor (71-AC-21 with diverter gate (71-DG-04);
- L. Bucket elevator (71-BE-04);
- M. Cooling cycle bucket elevator (71-BE-05) feeding cement cooler 71-CC-04;
- N. Fluidized cement cooler (71-CC-04);
- O. Cement cooler purge air conveyor (71-AC-28);
- P. Separator feed air conveyors (71-AC-22 and '-23) with diverter gates (71-DG-01, '-02, '-03);
- Q. Dynamic separator (71-SP-03);
- R. Separator rejects air conveyor (71-AC-24);
- S. Fabric collector (71-DC-08) with fan (71-FA-08 serving dynamic separator 71-SP-03 including discharge air conveyors 71-AC-25 and '-26 and bucket elevator 81-BE-01;
- T. Fabric collector (71-DC-09) with fan (71-FA-09) serving static separator 71-SP-04;
- U. Fabric collector discharge screw conveyors (71-SC-17, '-18, and '-19);
- V. Fabric collector (71-DC-10) with fan (71-FA-10) serving air conveyor 71-AC-21, cement cooler 71-CC-05, and bucket elevators 71-BE-04 and '-05;
- W. Air conveyor (71-AC-27) with discharge to bucket elevator 81-BE-01;
- X. Diverter gate (71-GA-21) from air pumps 71-CX-01 and '02 to alleviator 81-AL-01;
- Y. Fabric collector (71-DC-13) with fan (71-FA-13) serving belt conveyor 71-BC-12;
- Z. One 220-ton enclosed limestone silo 71-SL-12 with manual withdrawal shut-off gate;
- AA. One 212-ton enclosed gypsum silo 71-SL-13 with manual withdrawal shut-off gate;
- BB. One 250-ton enclosed pozzolan silo 71-SL-14 with rotary feeder and manual withdrawal;

Emission Unit 036 Permit Conditions

- CC. Three weighfeeders 71-WF-14, -15 and -16 for the above silos. Each weighfeeder includes a scavenger chain drag (71-CD-17 (pending), 18 -19) to capture dust generated by material sticking to the belt and shaken loose at the return rollers;
- DD. Fabric dust collector 71-DC-19 with fan 71-FA-19, 4500 acfm, serving the silos discharge and the weighfeeders;
- EE. Belt conveyor 71-BC-13, collecting the material from the weighfeeders, discharging onto belt conveyor 71-BC-12 and served by fabric dust collector 71-DC-21; and
- FF. The unloading hopper (PTO #1128006) over belt conveyor 62-BC-10 will be removed.
- GG. Blower (52-BL-07) servicing an 8" screw conveyor with bin vent filter (71-DC-21)
- HH. Fabric dust collector 71-DC-21 with fan 71-FA-21, 7,100-acfm, serving silo 71-SL-11 discharge, weighfeeder 71-WF-11 and belt conveyor 71-BC-13.

**OPERATIONAL CONDITIONS:**

1. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)
2. Fabric collectors shall be in operation when conveyors are in operation. (Rule 210.1)
3. Material collected in dust collectors shall be disposed in manner preventing entrainment in atmosphere. (Rule 209)
4. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
5. Visible emissions from all emission points shall be less than 5% opacity except bulk storage, which shall be less than 10% opacity. (Rule 210.1 BACT)
6. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)
7. All piping, ducting, connections, and elevators shall be leak-tight and shall have no visible emissions. (Rule 209)
8. Dust collectors shall have operational pressure differential indicators on each compartment. (Rule 209)
9. Visible emissions from equipment installed pursuant to Authority to Construct 1128036 shall be less than 5% opacity. (Rule 210.1 BACT)
10. Conveyors shall be covered when in operation. (Rule 209)
11. Fines collected in dust collectors shall be returned to process. (Rule 210.1)
12. Fabric collectors shall be in operation whenever finish mill is operating. (Rule 210.1)
13. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
14. 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 209)
15. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

Emission Unit 036 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with fabric collector emission limitations shall be verified, within 60 days of District request. (Rule 108.1)

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

Fabric Collector (62-DC-07)	0.011	gr/scf
	0.66	lb/hr
	15.84	lb/day
	2.89	ton/yr
Fabric Collector (71-DC-13)	0.011	gr/scf
	0.38	lb/hr
	9.15	lb/day
	1.67	ton/yr
Fabric Collector (71-DC-08)	0.005	gr/scf
	5.23	lb/hr
	125.49	lb/day
	22.90	ton/yr
Fabric Collector (71-DC-09)	0.011	gr/scf
	3.46	lb/hr
	83.05	lb/day
	15.16	ton/yr
Fabric Collector (71-DC-10)	0.011	gr/scf
	0.96	lb/hr
	23.10	lb/day
	4.22	ton/yr
Fabric Collector (71-DC-19)	0.003	gr/scf
	0.08	lb/hr
	1.94	lb/day
	0.36	ton/yr
Fabric Collector 71-DC-21:	0.01	gr/scf
	0.61	lb/hr
	14.61	lb/day
	2.67	ton/yr

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

Emission Unit 036 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 three years. (Rules 209 and 210.1)

**SPECIAL CONDITIONS:**

- aa. The owner or operator shall perform CARB Method 5 on fabric collector 71-DC-08 to determine compliance with the grain loading of 0.005 gr/scf no later than 60 days after startup. District must be notified 30 days prior to any compliance source testing and the owner shall submit a source test plan for District approval 15 days prior to source sampling. Results shall be submitted to the District no later than 60 days within the test date. (Rules 108.1 and 210.1)



Emission Unit 037 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	037	<u>Emergency Piston Engine with Generator</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

Portable emergency electrical generator driven by 196-bhp turbocharged and aftercooled diesel-fired piston engine.

**OPERATIONAL CONDITIONS:**

1. Engine crankcase vent shall be equipped with positive ventilation system or 90% efficient control device for crankcase VOC emissions. (Rule 210.1, BACT Requirement)
2. Engine shall be equipped with turbocharger. (Rule 210.1, BACT Requirement)
3. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rule 210.1)
4. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not exceed 5% opacity or Ringelmann No. 3 for more than three minutes in any one hour. (Rule 210.1, BACT Requirement)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grain/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
6. Engine timing shall be retarded 4° from standard. (Rule 210.1, BACT Requirement)
7. Fuel for diesel piston engine shall conform to California Air resources board standards for reformulated diesel fuel. (Rule 210.1, BACT Requirement)
8. Engine operation shall not exceed 200 hours per year without prior District approval. (Rule 210.1)
9. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rule 210.1, BACT Requirement)
10. Compliance with all operational conditions shall be verified by appropriate record keeping including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
11. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Section 41700)
12. Emergency use engine shall not be operated as part of a voluntary power curtailment program. (Rule 210.1)

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 60 days of district request. (Rule 108.1)

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

**Carbon Monoxide:** 0.77 lb/hr  
18.56 lb/day  
0.08 ton/yr

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

- aa. All equipment shall be designed, installed and operated as described in application for Authority to Construct unless advance approval is granted for alternative.
- bb. This source is exempt from PSD review because of  $PM_{10}$  emission reductions made from existing operations concurrently with new equipment installation. Any relaxation in this limit which increases your potential to emit above the applicable PSD threshold will require a full PSD review of the affected source as if construction had not yet commenced.

Emission Unit 038 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	038	<u>Screening Plant</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Screening Plant, including following equipment:

- A. One 10' by 7' inclined screen;
- B. One diesel engine (exempt) equipped with air cleaner; and
- C. One discharge conveyor.

**OPERATIONAL CONDITIONS:**

- 1. Throughput shall not exceed 30,000 tons per year without prior District approval. (Rule 210.1)
- 2. Screening shall be limited to only quarry storage pile. No other material shall be screened without prior District approval. (Rule 210.1)
- 3. Dust suppressant or water shall be applied if visible emissions exceed 10%. (Rule 210.1)
- 4. Drop heights shall be kept at a minimum to limit visible emissions. (Rule 210.1)
- 5. Visible emissions from storage, conveyor transfer points and bulk loading and unloading systems shall be limited to 10% opacity. (Rule 422)
- 6. Operation of this equipment shall be conducted in compliance with data and specifications submitted with application under which this permit is issued. (Rule 210.1)
- 7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
- 8. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**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 038 Permit Conditions

**EMISSION LIMITS:**

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

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

0.16 lbm/hr  
1.28 lb/day  
0.14 ton/yr

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

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

Emission Unit 039 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	039	<u>Tire Derived Fuel Storage, Receiving, and Handling Equipment</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Tire Derived and Wood Fuel Storage, Receiving, and Handling Equipment, including following equipment:

- A. Two storage bins equipped with "live" bottoms (Sampson feeders) (54-BN-05 and -06);
- B. Two weighfeeders (54-WF-05 and -06) each serving one 54-BN-05 or 54-BN-06 measuring TDF and wood fed to precalciner burner;
- C. Three enclosed outdoor TDF and wood storage containment structures;
- D. Auxiliary outdoor 3-sided TDF and wood storage containment structure 90-ft. by 140-ft;
- E. Belt conveyor transferring material from weighfeeders to a metering feeder;
- F. Transfer feeder (54-VF-01) transferring the material from the belt conveyor to airlock at precalciner;
- G. Airlock to prevent loss of heat from the precalciner and provide a safety feature against blowback (54-TV-07);
- H. Calciner burner chamber (51-BU-02);
- I. TDF and wood hopper, conveyor screw, blower, eductor and piping (PTO No. 1128040);
- J. One 1500 gallon surfactant storage tank;
- K. Control panel for optimizing the addition of surfactant;
- L. TDF Surfactant spray nozzles located at three (3) points:
  - 1. Discharge of weighfeeder 54WF01;
  - 2. Discharge of belt conveyor 54BC01;
  - 3. Discharge of vibrating conveyor 54VF01;
- M. Associated piping for water, surfactant and compressed air;
- N. Fabric dust collector (54DC02) with 10-hp fan motor producing 3700-dscfm exhaust flow rate and 1092-sq.ft. of filter area; and
- O. Fabric dust collector (54DC03) with 10-hp fan motor producing 2400-dscfm exhaust flow rate and 691-sq.ft. of filter area.

**OPERATIONAL CONDITIONS:**

- 1. Fabric collectors 54DC02 and 54DC03 shall each be equipped with operational differential pressure indicator. (Rule 210.1)
- 2. Fabric collector 54DC02 and 54DC03 shall each be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
- 3. Particulate matter emissions from fabric collectors 54DC02 and 54DC03 exhaust shall not exceed 0.003-gr/scf. (Rule 210.1)

Emission Unit 039 Permit Conditions

4. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
5. Average tire chip (TDF) size shall not be smaller than one inch. (Rule 210.1)
6. TDF stored at National Cement shall not exceed a one-month supply with prior District approval and State Permit to Store waste tires. A one-month supply of TDF shall be based California Public Resources Code §42823.5(a)(1)(A) or (B).
7. Storage facility dimensions shall not exceed 12-feet in height, with the actual storage height of TDF not to exceed 10-feet in height.
8. TDF outdoor storage shall have fire monitor/hydrant system with 4-inch National Standard connections around the storage area with minimum flow of 500-gallons per minute and spray pattern that covers the entire area in case of fire.
9. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, Subpart F)
10. TDF shall include only chipped tires and/or tire fluff with a heat value of at least 10,000 Btu per pound. TDF shall be utilized solely for fuel in the preheater/precalciner cement kiln system. Average fuel chip size shall not be smaller than one inch. Tire fluff may be smaller than one inch and is defined as a shredded byproduct of waste tire processing, which contains crumbed rubber, cord and small amounts of steel. TDF usage shall not include utilization of whole tires. (Rule 210.1)
11. TDF transfer to kiln system shall be limited to percentage specified in current version of ATC/PTO 1128004. (Rule 210.1)
12. Tire chip storage shall be limited to covered trailers or storage bins during normal operations. (Rules 209, 210.1 BACT and 401)
13. Outdoor tire chips storage structure shall not exceed 12,600-sq. ft without prior District approval. (Rule 210.1)
14. No tire chips or tire fluff shall be stored on dirt, except in emergency situations. (Rules 209, 210.1 BACT and 401)
15. Tire fluff shall be under covered storage and conveyed pneumatically and/or via belt conveyor according to the location of use (i.e. rotary kiln and/or precalciner). (Rule 210.1)
16. Applicant shall transfer tire chips from covered trailers directly to storage bins during normal operations. (Rule 210.1 and 401)
17. There shall be no visible emissions from operation, except for receiving hopper, 54-BN-05. (Rule 210.1 BACT)
18. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
19. Equipment shall be maintained according to manufacturer's specifications. (Rules 209 and 210.1)
20. 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)
21. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
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. Each fabric collector exhaust stack shall be equipped with provisions for collection of pollutant samples in manner consistent with U. S. EPA test methods. (Rule 210.1)

Emission Unit 039 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:**

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

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

Fabric Collector (54DC02) (@ 3,700-acfm)	0.003	gr/acf
	0.10	lb/hr
	2.28	lb/day
	0.42	tons/yr
Fabric Collector (54DC03) (@ 2,400-acfm)	0.003	gr/scf
	0.06	lb/hr
	1.48	lb/day
	0.27	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 three years. (Rules 209 and 210.1)

**SPECIAL CONDITIONS:**

National Cement shall provide District with written approval of Kern County Fire Department approval of proposed 12,600-sq.ft. chip tire storage facility prior to construction of subject storage facility. (Rule 210.1)

Emission Unit 040 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	040	<u>Secondary Alternate Fuels Receiving/Handling System</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Secondary Alternate Fuels Receiving/Handling System, including following equipment:

- A. Two enclosed outdoor storage Tire Derived Fuel (TDF) and Wood Derived Fuel (WDF) storage containment structures (shared with PTO No. 1128039);
- B. Auxiliary outdoor 3-sided TDF and WDF storage containment structure 90-ft. by 140-ft (shared with PTO No. 1128039);
- C. TDF and WDF loading hopper (54-BN-05) with three sided spill guard;
- D. Screw conveyor to transfer TDF and WDF to the weigh feeder (54-SF-05);
- E. Weigh feeder to measure the amount of TDF and WDF introduced to the system (54-WF-05);
- F. 4" TDF and WDF pneumatic conveying line with 850-cfm blower driven by 75-hp motor to the precalciner (54-BL-05);
- G. Piping to convey, TDF and WDF to the main burner at the rotary kiln.

**OPERATIONAL CONDITIONS:**

1. Maximum process rate of WDF loaded on alternative fuel conveyance system shall not exceed 40,000 tons per year without prior District approval. (Rule 210.1)
2. Average fuel chip size shall not be smaller than one inch. (Rule 405)
3. TDF shall be utilized solely for fuel in the precalciner/preheater cement kiln system. Average fuel chip size shall not be smaller than one inch. Tire fluff may be smaller than one inch and is defined as a shredded byproduct of waste tire processing, which contains crumbed rubber, cord and small amounts of steel. TDF usage shall not include utilization of whole tires. (Rule 210.1)
4. Receiving and conveying operation shall be used for solid fuel only. (Rule 210.1)
5. No tire chips, wood or tire fluff shall be stored on dirt, except in emergency situations. (Rules 210.1 BACT and 401)
6. Owner/ operator shall take measures necessary to prevent formation of dust on fuel, i.e. short-term storage, enclosed or covered piles. (Rules 209, 210.1 BACT and 401)
7. Petroleum coke feed through the fuel handling system shall be maintained at moisture content greater than or equal to 8%. (Rule 210.1 BACT requirement)
8. Tire fluff shall be under covered storage and conveyed pneumatically and/or via belt conveyor according to the location of use (i.e. rotary kiln and/or precalciner). (Rule 210.1)
9. There shall be no visible emissions from operation. (Rule 210.1 BACT)
10. 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)



Emission Unit 040 Permit Conditions

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)

**EMISSION LIMITS:**

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

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

**Alternative WDF Fuel Loading Hopper/Weighfeeder:**

0.24 lb/day (365-day average)

0.04 ton/year

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

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and record keeping 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. (Rule 210.1)

Emission Unit 042 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	042	<u>Preheater/Precalciner Cement Kiln System</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. Blending silo (south, 42-SL-01) ventilated to item D;
- B. Blending silo (center, 42-SL-02) ventilated to item D;
- C. Blending silo (north, 42-SL-03) ventilated to item D;
- D. Fabric collector (42-DC-02) with fines conveyor (42-SC-07);
- E. Air conveyor (42-AC-13) from silo (42-SL-01);
- F. Air conveyor (42-AC-14) from silo (42-SL-02);
- G. Air conveyor (42-AC-15) from silo (42-SL-02);
- H. Air conveyor (42-AC-16) from silo (42-SL-03);
- I. Elevator (north, 42-BE-02);
- J. Elevator (south, 42-BE-03);
- K. Mix box (42-MB-01);
- L. One air conveyor (42-AC-19);
- M. Air conveyor (42-AC-24);
- N. Additive silo (71-SL-11);
- O. Air conveyor (51-AC-02) served by dust collector (42-DC-02);
- P. Two diverter gates (42-DG-08 and 42-DG-09);
- Q. Bucket elevator (42-BE-06 and 60 hp) served by dust collector (42-DC-08) and fan (42-FA-08) (1945 dscfm and 7.5 hp);
- R. Air conveyor (42-AC-25) with blower (42-BL-12 and 5 hp);
- S. Constant level bin (42-BN-01) equipped with blower (42-BL-13 and 20 hp), and served by dust collector (42-DC-09) and fan (4860 dscfm and 15 hp);
- T. Weigh scale (42-WS-02);
- U. Two air conveyors (42-AC-26 and 42-AC-27), transporting material from bin (42-BN-01) to air conveyor 42-AC-28, with blower 42-BL-14 (10 hp);
- V. Fuel oil storage tank (51-TK-01, permit exempt);
- W. 150 MMBtu/hour coke/TDF/natural gas/ wood derived -fueled, precalciner preceded by multi-stage preheater (51-PH-01);
- X. Rotary kiln (51-KN-01) with one multi-channel Fuller Duoflex low NOx burner with provisions to introduce #2 fuel oil, natural gas, petroleum coke, TDF and wood derived materials with a nominal rating of 10 ton/hr of coke for production of approximately 3,400 ton/day clinker (daily clinker production rating to be superseded by rating in modification '042L upon '042L startup inspection);
- Y. Evaporative cooling tower (51-CT-01) with hopper and 24-inch screw conveyor; (existing)
- Z. Rotary valve (51-RV-29);

Emission Unit 042 Permit Conditions

- AA. Tempering air damper (51-DA-34);
- BB. Bucket elevator (51-BE-03) with 280 feet lift served by 8,200 acfm pulse jet fabric collector (51-DC-08);
- CC. 70-ton capacity preheater/precalciner cement kiln system feed recirculation bin (51-BN-02) receiving bypass material from bucket elevator (51-BE-03);
- DD. Preheater/precalciner cement kiln system fabric collector (51-BH-02), including pulse jet air cleaning mechanism, rated at 300,000 acfm @ 450° F;
- EE. Preheater/precalciner cement kiln system fabric collector exhaust fan (51-FA-11) rated at 300,000 acfm @ 17 inches w.c. and 450° F, preheater/precalciner cement kiln system and preheater ID fan (51-FA-15) rated at 300,000 acfm @ 28 in. w.c. and 450° F, exhausting to circular cross section exhaust stack;
- FF. Preheater/precalciner cement kiln system exhaust ductwork, 7 ft. 6 in. ID, from evaporative cooling tower (51-CT-01), to preheater/precalciner cement kiln system fabric collector (51-BH-02);
- GG. Fabric collector (51-BH-02) exhaust ductwork, 8 ft. 6 in ID, from exhaust fan to exhaust stack. (existing) NaOH injection system including 1000-gallon polyethylene storage tank with aqueous 25% NaOH, transfer pump delivering NaOH to system feeding conditioning tower, associated piping and valves;
- HH. Fabric collector (71-DC-13) exhaust ductwork, 8-inches in diameter, from dust pump (51-CX-01) to cement finish mill #3 (PTO #1128036);
- II. Rotary feeder (71-RF-XX) and a blower (71-BL-XX) feeding dust collector (71-DC-13); and
- JJ. Sorbent injection system (for mercury control) with bulk bag unloader, bin discharger and 5-hp blower.
- KK. Ammonia injection system, reagent for selective non-catalytic reduction system (SNCR), including: 20,000-gallon ammonia storage tank, ammonia pump, distribution piping to injection ports at calciner, and injection control system;
- LL. Oxygen Injection System, including two (2) 13,000 gallon oxygen tanks and vaporizer.

**OPERATIONAL CONDITIONS:**

1. Kiln exhaust stack shall be equipped with continuous monitor/recorder, secured against tampering after calibration, for ammonia. (Rule 210.1 and 419)
2. Ammonia injection system shall be equipped with ammonia metering system determining rate of ammonia injection. (Rule 210.1)
3. Oxygen injection system shall be installed and maintained in accordance with manufacturer's specification. (Rule 210.1)
4. Cement kiln system shall be fired only with coal, petroleum coke, natural gas, fuel oil, TDF or wood-derived materials. No other combustible products shall be added to cement kiln system without prior written permission of Control Officer. (Rule 210.1)
5. Wood derived fuel shall not exceed 30% of the total heat content of the fuel, based on a quarterly basis. (Rule 210.1)
6. TDF shall include only chipped tires and/or tire fluff with a heat value of at least 10,000 Btu per pound.
7. TDF usage shall not include utilization of whole tires. (Rule 210.1)
8. TDF shall be utilized solely for fuel in the cement kiln system. (Rule 210.1)
9. TDF average fuel chip size shall not be smaller than one inch. TDF tire fluff may be smaller than one inch and is defined as a shredded byproduct of waste tire processing, which contains crumbed rubber, cord and small amounts of steel. (Rule 210.1)
10. TDF utilized for pyroprocessing system shall not exceed 50% annually, and 55% calculated over a 168-hour (7-day) rolling average, without prior District approval. (Rule 210.1)

Emission Unit 042 Permit Conditions

11. TDF use shall not exceed 70% of all fuel on a weight basis within any 24-hour period. (Rule 210.1)
12. TDF shall be stored according to the approved site plan reviewed and the Certificate of Compliance issued by the Kern County Fire Department. (Rule 210.1)
13. Cement kiln system shall be operated using TDF only when all pyroprocessing system control equipment is operated pursuant to manufacturer's recommendations resulting in particulate emissions not exceeding 0.015-gr/scf and 0.30-lb/ton of kiln feed. (Rules 210.1 and 422, Subpart F)
14. Exhaust stack gas NOX emissions shall not exceed 1.5 lb/ton of clinker (as NO2) when averaged over any 30 consecutive day period, excluding periods of non-production. (Rule 425.3)
15. Dust collectors or water spray(s) shall be provided at all raw material transfer and crushing points upstream of cement kiln system with potential to emit dust. Each water spray installation shall deliver sufficient water to eliminate visible emissions. (Rule 210.1)
16. All fines collected in dust collectors shall be returned to process or introduced into final product. (Rule 210.1)
17. Pneumatic conveying line from kiln baghouse (51-BH-02) to additive silos (71-SL-01 and 71-SL-11) shall have no holes or opening causing emissions into the atmosphere. (Rule 210.1)
18. Ducting shall remain airtight and sealed. (Rule 210.1 BACT Requirement)
19. All raw material conveyors upstream of cement kiln system shall be covered/enclosed and shall not exhibit visible emissions. (Rule 210.1)
20. Each fabric collector shall have operational differential pressure indicator. (Rule 210.1)
21. Sorbent material injection (for mercury control) shall not exceed more than 50-lb/hr. (Rule 210.1) Changes to the type of sorbent used in this system shall be considered Alternative Operating Scenarios. The operator shall notify the District in writing seven days prior to any change to a new type of sorbent and the permittee shall keep a log of all such changes in the type of sorbent being used. (Rule 210.1)
22. National Cement shall maintain files including: a) data collected from in-stack monitoring instruments and process monitoring, b) fuel input rate, c) clinker production rates, and d) results of all source tests and calibration checks.
23. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rule 422, Subpart F)
24. Exhaust stack shall be equipped with continuous emission monitors/recorders, secured against tampering after calibration, for nitrogen oxides and particulate matter. (Rule 210.1)
25. Precalciner combustion chamber shall be equipped with continuous monitors/ recorders for oxygen, oxides of nitrogen and carbon monoxide. Exhaust stack monitors shall be accessible to staff via remote connection approved by the APCO and provide data for the last 24 hours. (Rule 210.1)
26. 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)
27. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of hourly clinker production and other operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 107)
28. APCO or any authorized representative shall upon request have access to, and be provided with, copies of any record required to be kept under terms conditions of this permit. Furthermore, such persons shall have access to inspect any equipment, operation, or method required in this permit, and to sample, or requires sampling, of emission sources. (Rule 107)

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29. 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:**

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

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

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

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

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

**EMISSION LIMITS:**

Maximum emission rate of each air contaminant from Cement Kiln System Fabric Collectors (Kiln Fabric Collector) shall not exceed following emissions limitations (hourly limits may be averaged over 24 hour period):

**Particulate Matter:**

From Kiln Fabric Collector (51-BH-02):

0.015	gr/scf
0.3	lb/ton (dry) of feed to kiln (Rule 422, 40 CFR Part 60, Subpart F)
0.07	lb/ton clinker (Rule 423, 40 CFR Part 63 Subpart LLL)
40.00	lb/hr
960.00	lb/day
175.20	ton/yr

From Kiln Feed Fabric Collector (51-DC-08):

0.01	grains/acfm
0.70	lb/hr
16.87	lb/day
3.08	ton/yr

Emission Unit 042 Permit Conditions

**Particulate Matter:**

Kiln Feed Fabric Collector (42-DC-02):	0.012	gr/scf
	0.89	lb/hr
	21.26	lb/day
	3.88	ton/yr
	0.01	grains/acfm

From Bucket Elevator Dust Collector (42-DC-08):	0.17	lb/hr
	4.01	lb/day
	0.73	ton/yr

From Constant Level Bin Dust Collector (42-DC-09):	0.01	grains/acfm
	0.42	lb/hr
	10.01	lb/day
	1.83	ton/yr

**Sulfur Oxides:**

From Kiln Fabric Collector (51-BH-02):	0.4	lb/ton of clinker (30 day rolling average) (Rule 422, Subpart F)
	53.83	lb/hr (as SO <sub>2</sub> )
	1,291.92	lb/day (as SO <sub>2</sub> )
	5.83	b/hr (as SO <sub>4</sub> )
	139.92	lb/day (as SO <sub>4</sub> )

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

From Kiln Fabric Collector (51-BH-02):	1.5	lb/ton of clinker (30 day rolling average) (Rule 425.3)
	481.67	lb/hr (Rule 210.1 BACT)
	5,400.00	lb/day (30 day rolling average)
	985.50	ton/yr (365 day rolling average)

**Volatile Organic Compounds (VOC):**

From Kiln Fabric Collector (51-BH-02):	240.00	lb/day
	43.80	ton/yr

**Carbon Monoxide:**

From Kiln Fabric Collector 51-BH-02	1,200.00	lb/hr
	28,800.00	lb/day
	5,256.00	ton/yr

**Ammonia Slip:**

(from SNCR ammonia injection)	10.0	ppmv (1-hr average) (CH&SC 41700)
	8.09	lb/hr
	194.12	lb/day
	70,851.99	lb/yr

Emission Unit 042 Permit Conditions

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

**Dioxin/Furans (D/F):**

From Kiln Fabric Collector 51-BH-02

0.40 ng/dscm TEQ @7% O<sub>2</sub>

**Mercury:**

From Kiln Fabric Collector 51-BH-02

55 lb/MMtons clinker (30 day rolling average)

**Total Hydrocarbons (THC):**

From Kiln Fabric Collector 51-BH-02

24 ppmvd @7% O<sub>2</sub> (30 day rolling average)

**Hydrogen Chloride (HCl):**

From Kiln Fabric Collector 51-BH-02

3 ppmvd @7% O<sub>2</sub> (30 day rolling average)

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

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

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

**SPECIAL CONDITIONS:**

- aa. Increases in fugitive dust emissions from equipment, haul roads, storage piles, etc., due to production increases shall be offset through use of best available control provisions such as increased use of water spray application and/or use of dust palliatives. Particulate control for all haul roads shall be no less than 79.6% and shall be achieved by application of water or EKAPCD-approved dust palliative(s). (Rule 210.1)
- bb. Visible fugitive dust emissions from all haul roads shall not exceed 10% opacity. (Rule 210.1 BACT)
- cc. Reports of excess emissions shall be submitted semiannually for all opacity exceedances of 6 minutes or longer. Report shall comply with requirements of Code of Federal Regulations Section 40 Part 60.7c. (Rule 422)

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Emission Unit 042 Permit Conditions

dd. Throughputs and fugitive dust emissions shall not exceed following limits:

Source	Maximum Throughput	PM-10 Emissions
	<b>Tons/Year</b>	<b>Tons/Year</b>
Quarry Drilling	2,468,916	0.12
Quarry Blasting	2,468,916	0.16
	<b>Maximum</b>	
	<b>Vehicle Miles</b>	<b>Tons/Year</b>
Haul Road	270,188	447.97
Waste Dust Haul Road	0	0
Waste Dust Stockpile	0	0
<b>Total PM-10 Emissions in Tons Per Year</b>		<b>448.25</b>

Written records to demonstrate compliance with these limits shall be maintained and made immediately available for District examination. (Rules 107 and 210.1 and District Fugitive Dust Policy #95-02)

Emission Unit 042 Permit Conditions

- ee. No new unpaved roadways shall be constructed or utilized without prior written approval from District. (Rule 210.1)
- ff. Compliance with the continuous monitoring requirements for HCl listed in 40 CFR Part 63 Subpart LLL shall be verified with either an HCl Continuous Emissions Monitoring System (CEMS), Continuous Parameter Monitoring System (CPMS), or an SO<sub>2</sub> CEMS, in accordance with 40 CFR §63.1348(b)(8) and 40 CFR §63.1350(l). (Rule 423 - 40 CFR Part 63 Subpart LLL)
- gg. Compliance with 10-ppm ammonia slip limit shall be verified by determining the ammonia injection flow rate from the SNCR system, as measured by the ammonia metering system (in gallons per minute), correlating to a 9-ppm increase in ammonia concentration, as observed by the continuous ammonia monitor/recorder. This flow rate shall be the maximum allowable injection rate of ammonia, averaged over a time period of 1-hour, into the pyroprocessing system. National Cement shall perform this test on a quarterly basis, and while the roller mill is operating; results of test shall be submitted to the District within 60 days of completion and kept for a period of five years. (Rules 108.1, 210.1)
- hh. National Cement shall submit to the District the determined maximum injection rate of aqueous ammonia on a quarterly basis. (Rules 108.1, 210.1)



Emission Unit 044 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	044	<u>Fugitive Dust Yard Sweeper</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Fugitive Dust Yard Sweeper, including following equipment:

- A. 74-bhp Tier III diesel auxiliary engine, providing power to the filtration system; and
- B. Dust filtration system with 4.5 cubic yard hopper:
  - 1. Dual 39 inch gutter brooms;
  - 2. Pressurized water spray system with 130-gallon water storage capacity;
  - 3. Front and hopper mounted spray bars;
  - 4. 30 inch radial turbine blower; and
  - 5. 80 inch regenerative air style suction hood.

**OPERATIONAL CONDITIONS:**

- 1. 74-bhp auxiliary engine shall be equipped with turbocharger and intercooler. (Rule 210.1 BACT Requirement)
- 2. Elapsed time meter shall be installed and maintained indicating cumulative hours of auxiliary engine operating time. (Rule 210.1)
- 3. Road sweeping operation shall not exceed 2080 hours per year without prior District approval. (Rule 210.0)
- 4. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
- 5. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
- 6. Particulate matter emissions discharged into atmosphere shall not exceed 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
- 7. An owner or operator shall service the engine in accordance with following NO<sub>x</sub> minimization maintenance schedule (Rule 427):
  - a. Lubricating Oil and Filter: Change once every three months or after no more than 300 hours of operation;
  - b. Inlet Air Filter: Clean once every three months or after no more than 300 hours of operation; replace once every 1000 hours of operation;
  - c. Fuel Filter: Clean once very year or replace once every 1000 hours of operation;
  - d. Intake and Exhaust Valves, Spark Plugs, Spark Timing and Dwell or Fuel Injection Timing, and Carburetor Mixture: Check and adjust to factory specifications once every year or after no more than 1000 hours of operation;
  - e. Spark Plugs and Ignition Points: Replace after 3000 hours of operation;
  - f. Coolant: Change once every year; and

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- g. Exhaust System: Check for leaks and/or restrictions once every year.
8. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (Rule 210.1)
9. Waste material collected from sweeping operation shall be disposed of in a manner preventing entrainment of particulate matter in atmosphere. (Rule 209 and 210.1)
10. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 427)
11. Operating record of the equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rule 210.1)
12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveals conditions indicative of non-compliance, compliance with diesel piston engine 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 74-bhp auxiliary diesel engine unit shall not exceed following limits:

<b><u>Particulate Matter (PM<sub>10</sub>):</u></b>	0.30 gm/bhp-hr
	0.05 lb/hr
	0.39 lb/day
	0.05 ton/year

<b><u>Sulfur Oxides (SO<sub>x</sub> as SO<sub>2</sub>):</u></b>	0.001 lb/hr
	0.006 lb/day
	0.001 ton/year

<b><u>Oxides of Nitrogen (NO<sub>2</sub>):</u></b>	3.30 gm/bhp-hr
	0.54 lb/hr
	4.31 lb/day
	0.56 ton/year

<b><u>Volatile Organic Compounds (VOC):</u></b>	0.20 gm/bhp-hr
	0.03 lb/hr
	0.26 lb/day
	0.03 ton/year

Emission Unit 044 Permit Conditions

<b><u>Carbon Monoxide(CO):</u></b>	3.70	gm/bhp-hr
	0.60	lb/hr
	4.83	lb/day
	0.63	ton/year

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

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

Emission Unit 045 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	045	<u>Quarry Drill</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

A. Blast-hole drill with Tier 4 diesel engine equipped with 862 acfm dust collector and water sprays.

**OPERATIONAL CONDITIONS:**

1. Quarry blast hole drill shall be equipped with a dust collection system. (Rule 210.1)
2. Water trucks shall be utilized to minimize dust from blasting, loading, and haul areas. (Rule 210.1)
3. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 20% opacity of Ringelmann No. 1 for more than 3 minutes in any one hour. (Rule 401)
4. Visible emissions from drilling operation shall not exceed 10% opacity or Ringelmann No. ½ for more than 3 minutes in any one hour. (Rule 210.1)
5. Exhaust gas particulate matter concentration shall not exceed 0.1 grains/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.05% by weight and low aromatic hydrocarbon, 20% by weight). (Rule 210.1)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 210.1)
8. Material collected in fabric collector shall be disposed in manner preventing entrainment in atmosphere. (Rule 210.1)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
10. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC 41700)

**COMPLIANCE TESTING REQUIREMENTS:**

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

Emission Unit 045 Permit Conditions

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

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

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

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

**EMISSION LIMITS:**

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):**

0.00 lb/hr

0.00 lb/day

0.00 ton/year

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

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

Emission Unit 046 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	046	<u>Truck-Mounted Vacuum</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

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

- A. 2016, 385 hp engine (permit exempt);
- B. Industrial vacuum loader including 6,000 cfm vacuum blower and baghouse with 60 filter bags.

**OPERATIONAL CONDITIONS:**

- 1. Vacuum unit exhaust particulate matter (PM<sub>10</sub>) concentration shall be no more than 0.01 gr/dscf. (Rule 210.1 BACT Requirement)
- 2. Vacuum unit shall not exceed 4000 hours of operation per year without District approval. (Rule 210.1)
- 3. Baghouse shall be equipped with reverse pulse cleaning mechanism and operational pressure differential indicator. (Rule 210.1)
- 4. Visible emissions from vacuum unit exhaust shall be no more than 5% opacity or Ringelmann No. 1/4 (Rule 210.1 BACT Requirement)
- 5. Baghouse shall be in operation when vacuum unit is operated. (Rule 210.1)
- 6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
- 7. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. Baghouse components and hoses shall be maintained on regular basis to prevent excessive emissions. (Rule 210.1)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 210.1)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

**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 046 Permit Conditions

**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):**

0.01 gr/dscf  
0.51 lb/hr  
8.23 lb/day  
1.03 ton/year

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

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

**Special Condition:**

Vacuum truck (PTO 1128041) shall be permanently removed from service and PTO cancelled upon implementation of this ATC. (Rule 210.1)

Emission Unit 048 Permit Conditions

<u>Facility Number</u>	<u>Emissions Unit</u>	<u>Description of Source</u>
1128	048	<u>Portable Crushing &amp; Screening Operation</u>

**Emission Unit Equipment Description/Permit Conditions**

**Federally Enforceable Conditions**

**EQUIPMENT DESCRIPTION:** Portable Crushing & Screening Operation, including the following equipment:

- A. Portable Closed Circuit Impactor/Screen Plant, including:
  - a. Hopper w/ Vibrating Grizzly Feed;
  - b. 450-bhp Tier 4 Final Diesel engine driving crusher & 150-kW generator (powering screen & conveyor motors);
  - c. Impact Crusher;
  - d. Feed Conveyor to Screen;
  - e. Two Deck Screen;
  - f. Oversize Material Return Conveyor; and
  - g. Feed Conveyor to Stacker.
- B. Self-Propelled Stacker with 60-bhp diesel engine (engine permit exempt – Rule 202.I.B)

**OPERATIONAL CONDITIONS:**

- 1. Crushing and screening units shall be equipped with water sprays. (Rule 210.1 BACT Requirement)
- 2. Conveyors shall be covered or equipped with water sprays to control visible emissions. (Rule 210.1 BACT Requirement)
- 3. Facility shall have provisions for wetting or covering limestone stockpiles. (Rule 210.1)
- 4. Engine shall be equipped with turbocharger, charge air cooler, exhaust gas recirculation, diesel oxidation catalyst, and selective catalytic reduction-urea. (Rule 210.1 BACT Requirement)
- 5. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (Rule 210.1)
- 6. Engine shall be equipped with a permanently affixed placard readily available for inspection with the following engine information: brake horsepower, make, model, serial number, and Tier number. (Rule 210.1)
- 7. Plant throughput shall not exceed 500 tons/hr nor 180,000 tons/yr without prior District approval. (Rule 210.1)
- 8. Plant operating time shall not exceed 1000 hours per year without prior District approval. (Rule 210.1)
- 9. Visible emissions from crusher shall not exceed 10% opacity (Ringelmann No. ½) for more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
- 10. Visible emissions from screening and conveyor transfer points shall not exceed 5% opacity for more than three minutes in any one-hour. (Rule 210.1 BACT Requirement)
- 11. Visible emissions from stockpiles and roadways shall not exceed 10% opacity (Ringelmann No. ½) for more than three minutes in any one-hour. (Rule 210.1)
- 12. Particulate matter emissions from any single source shall be no more than 0.1-gr/scf. (Rule 404.1)



Emission Unit 048 Permit Conditions

13. Water application system shall be available and used to wet material prior to unloading. (Rule 210.1 BACT Requirement)
14. Storage piles of crushed limestone from operation shall not exceed a footprint of 7.1 acres without prior District approval. (Rule 210.1)
15. Reasonably Available Control Measures (RACM) or Bulk Material Control Measures (BMCM) identified in National Cement's Fugitive Dust Control Plan shall be implemented to minimize fugitive dust emissions from stockpiles. (Rule 210.1 BACT Requirement, Rule 402)
16. Owner/operator shall perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system, and shall initiate corrective action within 24 hours if water is not flowing properly. (Rule 422, Subpart OOO)
17. Owner/operator shall maintain a logbook (written or electronic format) with records of each periodic inspection, including dates and corrective actions taken. Logbook shall be kept on site, and shall be made available to District staff upon request. (Rule 422, Subpart OOO)
18. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur content, 0.0015% by weight). (Rule 210.1 BACT Requirement)
19. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not be more than 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (Rule 210.1 BACT Requirement)
20. Exhaust gas particulate matter concentration shall not exceed 0.1 gr/ft<sup>3</sup> of gas at standard conditions. (Rule 404.1)
21. Engine shall comply with applicable requirements specified in the ATCM for stationary diesel-fueled engines. (Title 17, CCR §§93115 - 93115.15)
22. Operating record of diesel engine shall be maintained in format approved in writing by District, kept for a period of five years, and made available upon request to District personnel. Record shall include, at minimum: days and hours of operation, amount of fuel oil supplied to this engine, date(s) fuel was supplied, and engine check(s) including: air filters, fuel filters, oil filters, engine oil, exhaust system, coolant, and spark plugs (if so equipped). (Rule 210.1)
23. Equipment shall be maintained according to the manufacturer's specifications to ensure compliance with emission limitations. (Rules 210.1, 423 Subpart ZZZZ)
24. 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)
25. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 419 and CH&SC §41700)

**CONSTRUCTION ACTIVITY:**

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

Emission Unit 048 Permit Conditions

**COMPLIANCE TESTING REQUIREMENTS:**

Should inspection reveal conditions indicative of non-compliance, compliance with 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)

Compliance with opacity requirements from crushers, screens, and conveyors shall be verified using EPA Method 9 within 60 days after achieving maximum production rate, but not later than 180 days after initial startup. (Rule 422, Subpart 000)

**EMISSION LIMITS:**

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

**Limestone Crushing, Screening, & Stockpiling:**

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

<b><u>Impact Crusher:</u></b>	0.27	lb/hr
	6.48	lb/day
	0.05	ton/yr

**Two Deck Screen:**

0.37	lb/hr
8.88	lb/day
0.07	ton/yr

**Transfer Points:**

0.55	lb/hr
13.30	lb/day
0.10	ton/yr

**Stockpiles (Material Deposit + Wind Erosion):**

1.92	lb/hr
46.19	lb/day
1.84	ton/yr

**Total:**

<b>3.12</b>	<b>lb/hr</b>
<b>74.85</b>	<b>lb/day</b>
<b>2.05</b>	<b>ton/yr</b>

**Piston Engine:**

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

0.01	g/bhp-hr (BACT Requirement)
0.01	lb/hr
0.24	lb/day
0.005	ton/year

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

0.004	lb/hr
0.11	lb/day
0.002	ton/year

Emission Unit 048 Permit Conditions

<b><u>Oxides of Nitrogen (NO<sub>x</sub>):</u></b>	0.30	g/bhp-hr (BACT Requirement)
	0.30	lb/hr
	7.14	lb/day
	0.15	ton/year

<b><u>Volatile Organic Compounds (VOC):</u></b>	0.14	g/bhp-hr (BACT Requirement)
	0.14	lb/hr
	3.33	lb/day
	0.07	ton/year

<b><u>Carbon Monoxide (CO):</u></b>	2.6	g/bhp-hr (ATCM Requirement)
	2.58	lb/hr
	61.91	lb/day
	1.29	ton/year

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

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

#### **Standard**

§60.62(a)	On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any kiln any gases which:
§60.62(a)(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.
§60.62(a)(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 )

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

§60.63(b)(1)(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 $\pm 5$ percent accuracy.
§60.63(b)(2)	Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker or feed production before initial use (for new sources) or within 30 days of the effective date of this rule (for existing sources). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker or feed production.
§60.63(i)	<i>Development and Submittal (Upon Request) of Monitoring Plans.</i> To demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring (including PM CPMS), you must develop a site-specific monitoring plan according to the requirements in paragraphs (i)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under §60.13(3)(i). If you use a bag leak detector system (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.

§60.63(i)	<p>(i) Installation of the CEMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p>
§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)	You must demonstrate compliance with the PM standard in §60.62 using EPA method 5 or method 5I.

### **Recordkeeping**

§60.63(b)(3)	Record the daily kiln feed rates.
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### **Reporting**

§60.64(d)(1)	<p>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) (<a href="http://www.epa.gov/cdx">http://www.epa.gov/cdx</a>). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <a href="http://www.epa.gov/ttn/chief/ert/index.html">http://www.epa.gov/ttn/chief/ert/index.html</a>). 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/OAQPS/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</p>
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**FEDERAL REGULATIONS**  
**40 CFR 60 SUBPART IIII**  
**Standards of Performance for Stationary Compression Ignition**  
**Internal Combustion Engines**

**Requirements for Emergency *Compression Ignition Diesel Engines (CI RICE)* that Commenced Construction after July 11, 2005 and were Manufactured after April 1, 2006 or after July 1, 2006 for Fire Pump Engines**

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

**[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011, 86 FR 34357, June 29, 2021, and 88 FR 4471, January 24, 2023]**

**General Requirements**

§60.4218	The General Provisions in 40 CFR 60.1 through 60.19 apply as specified in Table 8 to Subpart IIII of part 60. [40 CFR 60.4218]
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**Emission Standards and Work Practices**

§60.4205	<p>(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.</p> <p>(d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.</p> <p>(1) For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:</p> <p>(i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;</p> <p>(ii) <math>45 \cdot n^{-0.2}</math> g/KW-hr (<math>34 \cdot n^{-0.2}</math> g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and</p> <p>(iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.</p> <p>(2) For engines installed on or after January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:</p> <p>(i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;</p> <p>(ii) <math>44 \cdot n^{-0.23}</math> g/KW-hr (<math>33 \cdot n^{-0.23}</math> g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and</p> <p>(iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.</p> <p>(3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).</p>
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	<p>(e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.</p> <p>(f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.</p>
§60.4206	<p>Owners and operators of CI ICE must operate and maintain the CI ICE over the entire life of the engine. [40 CFR 60.4206]</p>
§60.4207	<p>Diesel fuel must meet the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 CFR 60.4207(b)]</p> <p>Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder must use diesel fuel that meets a maximum per-gallon sulfur content of 1,000 parts per million (ppm).</p>
§60.4211	<p>1. The owner/operator shall:</p> <ol style="list-style-type: none"> <li>Operate and maintain the CI ICE and control devices according to the manufacturer's emission-related written instructions,</li> <li>Change only those emission-related settings that are permitted by the manufacturer; and</li> <li>Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.</li> </ol> <p>[40 CFR 60.4211(a)]</p> <p>2. You must operate the emergency CI ICE according to the requirements in 40 CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency ICE, any operation other than emergency operation, maintenance and testing, emergency demand response, and as otherwise described in 40 CFR 60.4211(f)(1) through (3), is prohibited. If you do not operate the engine according to these requirements, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]</p>

### **Monitoring and Recordkeeping Requirements**

§60.4209	<p>1. You must install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]</p> <p>2. If your CI RICE is equipped with a diesel particulate filter, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached. You must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached. [40 CFR 60.4209(b), 40 CFR 60.4214(c)]</p>
§60.4214	<p>3. Starting with the model years in Table 5 to Subpart IIII of 40 CFR part 60 the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]</p>



**Reports and Notification**

§60. 4214	1. If you own or operate an emergency CI RICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 60.4211(f)(2)(ii) and (iii), or that operates for the purposes specified in 40 CFR 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]
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**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.
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**Standard for Roadways**

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

§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)	<p>(1) In a facility being demolished, all the requirements of paragraphs (b) and (c) of this section apply, except as provided in paragraph (a)(3) of this section, if the combined amount of RACM is</p> <p>(i) At least 80 linear meters (260 linear feet) on pipes or at least 15 square meters (160 square feet) on other facility components, or</p> <p>(ii) At least 1 cubic meter (35 cubic feet) of facility components where the length or area could not be measured previously.</p>

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

<p>§61.145(b)</p>	<p>(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.</p> <p>(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.</p> <p>(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:</p> <p>(A) When the asbestos stripping or removal operation or demolition operation covered by this paragraph will begin after the date contained in the notice,</p> <p>(I) Notify the Administrator of the new start date by telephone as soon as possible before the original start date, and</p> <p>(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.</p> <p>(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,</p> <p>(I) Provide the Administrator with a written notice of the new start date at least 10 working days before asbestos stripping or removal work begins.</p> <p>(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.</p> <p>(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.</p> <p>(4) Include the following in the notice:</p> <p>(i) An indication of whether the notice is the original or a revised notification.</p> <p>(ii) Name, address, and telephone number of both the facility owner and operator and the asbestos removal contractor owner or operator.</p> <p>(iii) Type of operation: demolition or renovation.</p> <p>(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.</p> <p>(v) Procedure, including analytical methods, employed to detect the presence of RACM and Category I and Category II nonfriable ACM.</p>
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§61.145(b)	<p>(vi) Estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if off the facility components. Also, estimate the approximate amount of Category I and Category II nonfriable ACM in the affected part of the facility that will not be removed before demolition.</p> <p>(vii) Location and street address (including building number or name and floor or room number, if appropriate), city, county, and state, of the facility being demolished or renovated.</p> <p>(viii) Scheduled starting and completion dates of asbestos removal work (or any other activity, such as site preparation that would break up, dislodge, or similarly disturb asbestos material) in a demolition or renovation; planned renovation operations involving individual nonscheduled operations shall only include the beginning and ending dates of the report period as described in paragraph (a)(4)(iii) of this section.</p> <p>(ix) Scheduled starting and completion dates of demolition or renovation.</p> <p>(x) Description of planned demolition or renovation work to be performed and method(s) to be employed, including demolition or renovation techniques to be used and description of affected facility components.</p> <p>(xi) Description of work practices and engineering controls to be used to comply with the requirements of this subpart, including asbestos removal and waste-handling emission control procedures.</p> <p>(xii) Name and location of the waste disposal site where the asbestos-containing waste material will be deposited.</p> <p>(xiii) A certification that at least one person trained as required by paragraph (c)(8) of this section will supervise the stripping and removal described by this notification. This requirement shall become effective 1 year after promulgation of this regulation.</p> <p>(xiv) For facilities described in paragraph (a)(3) of this section, the name, title, and authority of the State or local government representative who has ordered the demolition, the date that the order was issued, and the date on which the demolition was ordered to begin. A copy of the order shall be attached to the notification.</p> <p>(xv) For emergency renovations described in paragraph (a)(4)(iv) of this section, the date and hour that the emergency occurred, a description of the sudden, unexpected event, and an explanation of how the event caused an unsafe condition, or would cause equipment damage or an unreasonable financial burden.</p> <p>(xvi) Description of procedures to be followed in the event that unexpected RACM is found or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.</p> <p>(xvii) Name, address, and telephone number of the waste transporter.</p> <p>(5) The information required in paragraph (b)(4) of this section must be reported using a form similar to that shown in Figure 3.</p>
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§61.145(c)	<p><b>Procedures for Asbestos Emission Control.</b></p> <p>(c)Each owner or operator of a demolition or renovation activity to whom this paragraph applies, according to paragraph (a) of this section, shall comply with the following procedures:</p> <p>(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:</p> <ul style="list-style-type: none"> <li>(i) It is Category I nonfriable ACM that is not in poor condition and is not friable.</li> <li>(ii) It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition; or</li> <li>(iii) It was not accessible for testing and was, therefore, not discovered until after demolition began and, as a result of the demolition, the material cannot be safely removed. If not removed for safety reasons, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and adequately wet at all times until disposed of.</li> <li>(iv) They are Category II nonfriable ACM and the probability is low that the materials will become crumbled, pulverized, or reduced to powder during demolition.</li> </ul> <p>(2) When a facility component that contains, is covered with, or is coated with RACM is being taken out of the facility as a unit or in sections:</p> <ul style="list-style-type: none"> <li>(i) Adequately wet all RACM exposed during cutting or disjoining operations; and</li> <li>(ii) Carefully lower each unit or section to the floor and to ground level, not dropping, throwing, sliding, or otherwise damaging or disturbing the RACM.</li> </ul> <p>(3) When RACM is stripped from a facility component while it remains in place in the facility, adequately wet the RACM during the stripping operation.</p> <ul style="list-style-type: none"> <li>(i) In renovation operations, wetting is not required if: <ul style="list-style-type: none"> <li>(A) The owner or operator has obtained prior written approval from the Administrator based on a written application that wetting to comply with this paragraph would unavoidably damage equipment or present a safety hazard; and</li> <li>(B) The owner or operator uses of the following emission control methods: <ul style="list-style-type: none"> <li>(1) A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the stripping and removal of the asbestos materials. The system must exhibit no visible emissions to the outside air or be designed and operated in accordance with the requirements in §61.152.</li> <li>(2) A glove-bag system designed and operated to contain the particulate asbestos material produced by the stripping of the asbestos materials.</li> <li>(3) Leak-tight wrapping to contain all RACM prior to dismantlement.</li> </ul> </li> </ul> </li> </ul>
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<p>§61.145(c)</p>	<p>(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.</p> <p>(iii) A copy of the Administrator's written approval shall be kept at the worksite and made available for inspection.</p> <p>(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:</p> <p>(i) Adequately wet the RACM during stripping; or</p> <p>(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.</p> <p>(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:</p> <p>(i) The component is removed, transported, stored, disposed of, or reused without disturbing or damaging the RACM.</p> <p>(ii) The component is encased in a leak-tight wrapping.</p> <p>(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.</p> <p>(6) For all RACM, including material that has been removed or stripped:</p> <p>(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</p> <p>(ii) Carefully lower the material to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.</p> <p>(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.</p> <p>(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.</p> <p>(7) When the temperature at the point of wetting is below 0 °C (32 °F):</p> <p>(i) The owner or operator need not comply with paragraph (c)(2)(i) and the wetting provisions of paragraph (c)(3) of this section.</p> <p>(ii) The owner or operator shall remove facility components containing, coated with, or covered with RACM as units or in sections to the maximum extent possible.</p>
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§61.145(c)	<p>(iii) During periods when wetting operations are suspended due to freezing temperatures, the owner or operator must record the temperature in the area containing the facility components at the beginning, middle, and end of each workday and keep daily temperature records available for inspection by the Administrator during normal business hours at the demolition or renovation site. The owner or operator shall retain the temperature records for at least 2 years.</p> <p>(8) Effective 1 year after promulgation of this regulation, no RACM shall be stripped, removed, or otherwise handled or disturbed at a facility regulated by this section unless at least one on-site representative, such as a foreman or management-level person or other authorized representative, trained in the provisions of this regulation and the means of complying with them, is present. Every 2 years, the trained on-site individual shall receive refresher training in the provisions of this regulation. The required training shall include as a minimum: applicability; notifications; material identification; control procedures for removals including, at least, wetting, local exhaust ventilation, negative pressure enclosures, glove-bag procedures, and High Efficiency Particulate Air (HEPA) filters; waste disposal work practices; reporting and recordkeeping; and asbestos hazards and worker protection. Evidence that the required training has been completed shall be posted and made available for inspection by the Administrator at the demolition or renovation site.</p> <p>(9) For facilities described in paragraph (a)(3) of this section, adequately wet the portion of the facility that contains RACM during the wrecking operation.</p> <p>(10) If a facility is demolished by intentional burning, all RACM including Category I and Category II nonfriable ACM must be removed in accordance with the NESHAP before burning.</p>
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**Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations**

§61.150	<p>Each owner or operator of any source covered under the provisions of §§61.144, 61.145, 61.146, and 61.147 shall comply with the following provisions:</p> <p>(a) Discharge no visible emissions to the outside air during the collection, processing (including incineration), packaging, or transporting of any asbestos-containing waste material generated by the source, or use one of the emission control and waste treatment methods specified in paragraphs (a) (1) through (4) of this section.</p> <p>(1) Adequately wet asbestos-containing waste material as follows:</p> <p>(i) Mix control device asbestos waste to form a slurry; adequately wet other asbestos-containing waste material; and</p> <p>(ii) Discharge no visible emissions to the outside air from collection, mixing, wetting, and handling operations, or use the methods specified by §61.152 to clean emissions containing particulate asbestos material before they escape to, or are vented to, the outside air; and</p> <p>(iii) After wetting, seal all asbestos-containing waste material in leak-tight containers while wet; or, for materials that will not fit into containers without additional breaking, put materials into leak-tight wrapping; and</p> <p>(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.</p>
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<p>§61.150</p>	<p>(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.</p> <p>(2) Process asbestos-containing waste material into nonfriable forms as follows:</p> <p>(i) Form all asbestos-containing waste material into nonfriable pellets or other shapes;</p> <p>(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.</p> <p>(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.</p> <p>(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).</p> <p>(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.</p> <p>(b) All asbestos-containing waste material shall be deposited as soon as is practical by the waste generator at:</p> <p>(1) A waste disposal site operated in accordance with the provisions of §61.154, or</p> <p>(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.</p> <p>(3) The requirements of paragraph (b) of this section do not apply to Category I nonfriable ACM that is not RACM.</p> <p>(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).</p> <p>(d) For all asbestos-containing waste material transported off the facility site:</p> <p>(1) Maintain waste shipment records, using a form similar to that shown in Figure 4, and include the following information:</p> <p>(i) The name, address, and telephone number of the waste generator.</p> <p>(ii) The name and address of the local, State, or EPA Regional office responsible for administering the asbestos NESHAP program.</p> <p>(iii) The approximate quantity in cubic meters (cubic yards).</p> <p>(iv) The name and telephone number of the disposal site operator.</p> <p>(v) The name and physical site location of the disposal site.</p>
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§61.150	<p>(vi) The date transported.</p> <p>(vii) The name, address, and telephone number of the transporter(s).</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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:</p> <p>(i) A copy of the waste shipment record for which a confirmation of delivery was not received, and</p> <p>(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.</p> <p>(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.</p> <p>(e) Furnish upon request, and make available for inspection by the Administrator, all records required under this section.</p>
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### Air Cleaning

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

§61.153	<p>(a) Any new source to which this subpart applies (with the exception of sources subject to §§61.143, 61.145, 61.146, and 61.148), which has an initial startup date preceding the effective date of this revision, shall provide the following information to the Administrator postmarked or delivered within 90 days of the effective date. In the case of a new source that does not have an initial startup date preceding the effective date, the information shall be provided, postmarked or delivered, within 90 days of the initial startup date. Any owner or operator of an existing source shall provide the following information to the Administrator within 90 days of the effective date of this subpart unless the owner or operator of the existing source has previously provided this information to the Administrator. Any changes in the information provided by any existing source shall be provided to the Administrator, postmarked or delivered, within 30 days after the change.</p> <p>(1) A description of the emission control equipment used for each process; and</p> <p>(i) If the fabric device uses a woven fabric, the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> and; if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in <math>\text{g}/\text{m}^2</math>, the minimum thickness in inches, and the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math>.</p> <p>(2) If a fabric filter device is used to control emissions,</p> <p>(i) The airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> (<math>\text{ft}^3/\text{min}/\text{ft}^2</math>) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun; and</p> <p>(ii) If the fabric filter device uses a felted fabric, the density in <math>\text{g}/\text{m}^2</math> (<math>\text{oz}/\text{yd}^2</math>), the minimum thickness in millimeters (inches), and the airflow permeability in <math>\text{m}^3/\text{min}/\text{m}^2</math> (<math>\text{ft}^3/\text{min}/\text{ft}^2</math>).</p> <p>(3) If a HEPA filter is used to control emissions, the certified efficiency.</p> <p>(4) For sources subject to §§61.149 and 61.150:</p>
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§61.153	<p>(i) A brief description of each process that generates asbestos-containing waste material; and</p> <p>(ii) The average volume of asbestos-containing waste material disposed of, measured in m<sup>3</sup>/day (yd<sup>3</sup>/day); and</p> <p>(iii) The emission control methods used in all stages of waste disposal; and</p> <p>(iv) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator, and the name and location of the disposal site.</p> <p>(5) For sources subject to §§61.151 and 61.154:</p> <p>(i) A brief description of the site; and</p> <p>(ii) The method or methods used to comply with the standard, or alternative procedures to be used.</p> <p>(b) The information required by paragraph (a) of this section must accompany the information required by §61.10. Active waste disposal sites subject to §61.154 shall also comply with this provision. Roadways, demolition and renovation, spraying, and insulating materials are exempted from the requirements of §61.10(a). The information described in this section must be reported using the format of appendix A of this part as a guide.</p>
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**FEDERAL REGULATIONS**  
**40 CFR 63 SUBPART A**  
**General Provisions**

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

**[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002 and FR 73885, Nov. 19, 2020]**

**Applicability**

§63.1(a)	<p><i>General.</i> (1) Terms used throughout this part are defined in §63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in §63.2.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(5) [Reserved]</p> <p>(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.</p> <p>(7)-(9) [Reserved]</p>
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<p>§63.1(a)</p>	<p>(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.</p> <p>(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.</p> <p>(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).</p>
<p>§63.1(b)</p>	<p>(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—</p> <p>(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and</p> <p>(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.</p> <p>(2) [Reserved]</p> <p>(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).</p>
<p>§63.1(c)</p>	<p>(c) <i>Applicability of this part after a relevant standard has been set under this part.</i> (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.</p> <p>(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—</p> <p>(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);</p> <p>(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</p>

<p>§63.1(c)</p>	<p>(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.</p> <p>(3)-(4) [Reserved]</p> <p>(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.</p> <p>(6) A major source may become an area source at any time upon reducing its emissions of and potential to emit hazardous air pollutants, as defined in this subpart, to below the major source thresholds established in § 63.2, subject to the provisions in paragraphs (c)(6)(i) and (ii) of this section.</p> <p>(i) A major source reclassifying to area source status is subject to the applicability of standards, compliance dates and notification requirements specified in (c)(6)(i)(A) of this section. An area source that previously was a major source and becomes a major source again is subject to the applicability of standards, compliance dates, and notification requirements specified in (c)(6)(i)(B) of this section:</p> <p>(A) A major source reclassifying to area source status under this part remains subject to any applicable major source requirements established under this part until the reclassification becomes effective. After the reclassification becomes effective, the source is subject to any applicable area source requirements established under this part immediately, provided the compliance date for the area source requirements has passed. The owner or operator of a major source that becomes an area source subject to newly applicable area source requirements under this part must comply with the initial notification requirements pursuant to § 63.9(b). The owner or operator of a major source that becomes an area source must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).</p> <p>(B) An area source that previously was a major source under this part and that becomes a major source again is subject to the applicable major source requirements established under this part immediately upon becoming a major source again, provided the compliance date for the major source requirements has passed, notwithstanding any provision within the applicable subparts. The owner or operator of an area source that becomes a major source again must comply with the initial notification pursuant to § 63.9(b). The owner or operator must also provide to the Administrator any change in the information already provided under § 63.9(b) per § 63.9(j).</p> <p>(ii) Becoming an area source does not absolve a source subject to an enforcement action or investigation for major source violations or infractions from the consequences of any actions occurring when the source was major. Becoming a major source does not absolve a source subject to an enforcement action or investigation for area source violations or infractions from the consequences of any actions occurring when the source was an area source.</p>
<p>§§63.1(e)</p>	<p>(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.</p>

**FEDERAL REGULATIONS  
NESHAPS SUBPART LLL**

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

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

**[71 FR 76549, Dec. 20, 2006]**

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

§63.1356	If you have an affected source subject to this subpart with a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, once you are in compliance with the most stringent emissions limit or requirement, you are not subject to the less stringent requirement. Until you are in compliance with the more stringent limit, the less stringent limit continues to apply.
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**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)	<p>The affected sources subject to this subpart are:</p> <ol style="list-style-type: none"><li>(1) Each kiln including alkali bypasses and in-line coal mills, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part;</li><li>(2) Each clinker cooler at any portland cement plant;</li><li>(3) Each raw mill at any portland cement plant;</li><li>(4) Each finish mill at any portland cement plant;</li><li>(5) Each raw material dryer at any portland cement plant;</li><li>(6) Each raw material, clinker, or finished product storage bin at any portland cement plant;</li><li>(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;</li><li>(8) Each bagging and bulk loading and unloading system at any portland cement plant; and</li><li>(9) Each open clinker pile at any portland cement plant.</li></ol>
§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.



§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	<p>The facility must comply with applicable general provisions requirements in subpart LLL as indicated by their cross references to 40 CFR part 63, subpart A, general provisions.</p> <p>63.1(a)(1)-(4), (6)-(8), (10)-(14); 63.1(b)(2)-(3); 63.1(c)(1), (2), (4)-(5); 63.1(e); 63.2; 63.3(a)-(c); 63.4(a)(1)-(3), (5); 63.4(b)-(c); 63.5(a)(1)-(2); 63.5(b)(1), (3)-(6); 63.5(d)(1)-(4); 63.5(e); 63.5(f)(1)-(2); 63.6(a); 63.6(b)(1)-(5), (7); 63.6(c)(1)-(2), (5); 63.6(f)(2)-(3); 63.6(g)(1)-(3); 63.6(h)(2), (4)-(5)(i), (6)-(7); 63.6(i)(1)-(14), (16); 63.6(j); 63.7(a)(1)-(3); 63.7(b); 63.7(c); 63.7(d); 63.7(e)(2)-(4); 63.7(f); 63.7(g); 63.7(h); 63.8(a)(1); 63.8(b)(1)-(3); 63.8(c)(1)-(8); 63.8(d) except for the reference to an SSM plan; 63.8(e); 63.8(f); 63.8(g); 63.9(a); 63.9(b); 63.9(c); 63.9(d); 63.9(e); 63.9(f); 63.9(g); 63.9(h)(1)-(3), (5)-(6); 63.9(i); 63.9(j); 63.10(a); 63.10(b)(1), (2)(iii), (2)(vi)-(ix); 63.10(c)(1), (5)-(8), (10)-(15); 63.10(d)(1)-(4); 63.10(e)(1)-(3); 63.10(f); 63.12(a)-(c); 63.13(a)-(c); 63.14(a)-(b); 63.15(a)-(b)</p>
§63.1343(a)	<p><i>General.</i> 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 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.</p>

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

§63.1343(b)(1)	<i>Kilns, clinker coolers, raw material dryers, raw mills, and finish mills.</i> The emission limits for these sources are shown in table 1 below.
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§63.1343(b)(1)  
Table 1

**Table 1—Emissions Limits for Kilns, Clinker Coolers, Raw Material Dryers , and Raw and Finish Mills**

	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	Major or area source	PM—0.07 <sup>1</sup> D/F—0.2 <sup>2</sup> Mercury—55 THC—24 <sup>2,3</sup>	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
2.	An existing kiln	Normal operation	Major or area source	HCL 3	ppmvd	7 percent.
3.	An existing kiln	Startup and shutdown	Major or area source	Work practices (63.1346(g))	NA.	NA.
4.	A new kiln	Normal operation	Major or area source	PM—0.02 <sup>1</sup> D/F—0.2 <sup>2</sup> Mercury—21 THC—24 <sup>2,3</sup>	lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd	NA. 7 percent. NA. 7 percent.
5.	A new kiln	Normal operation	Major source	HCL 3	ppmvd	7 percent.
6.	A new kiln	Startup and shutdown	Major or area source	Work practices (63.1346(g))	NA.	NA.
7.	An existing clinker cooler	Normal operation	Major or area source	PM 0.07	lb/ton clinker	NA.
8.	An existing clinker cooler	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA.	NA.
9.	A new clinker cooler	Normal operation	Major or area source	PM—0.02	lb/ton clinker	NA.
10.	A new clinker cooler	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA.	NA.
11.	An existing or new raw material dryer	Normal operation	Major or area source	THC—24 <sup>2,3</sup>	ppmvd	NA.
12.	An existing or new raw material dryer	Startup and shutdown	Major or area source	Work practices (63.1348(b)(9))	NA.	NA.
13.	An existing or new finish mill	All operating modes	Major source	Opacity 10	percent	NA.

<sup>1</sup>The initial and subsequent PM performance tests are performed using Method 5 or 5I and consist of three test runs.

<sup>2</sup>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).

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

<sup>4</sup>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)	<p>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:</p> $PM_{alt} = (0.0060 \times 1.65) (Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000) \quad (Eq. 1)$ <p>Where:</p> <p><math>PM_{alt}</math> = Alternative PM emission limit for commingled sources.</p> <p>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.</p> <p>1.65 = The conversion factor of ton feed per ton clinker.</p> <p><math>Q_k</math> = The exhaust flow of the kiln (dscf/ton feed).</p> <p><math>Q_c</math> = The exhaust flow of the clinker cooler (dscf/ton feed).</p> <p><math>Q_{ab}</math> = The exhaust flow of the alkali bypass (dscf/ton feed).</p> <p><math>Q_{cm}</math> = The exhaust flow of the coal mill (dscf/ton feed).</p> <p>7000 = The conversion factor for grains (gr) per lb.</p> <p>For new kilns that combine kiln exhaust and clinker cooler gas and/or coal mill and/or alkali bypass exhaust, the limit is calculated using the Equation 2 of this section:</p> $PM_{alt} = (0.0020 \times 1.65) (Q_k + Q_c + Q_{ab} + Q_{cm}) / (7000) \quad (Eq. 2)$ <p>Where:</p> <p><math>PM_{alt}</math> = Alternative PM emission limit for commingled sources.</p> <p>0.002 = The PM exhaust concentration (gr/dscf) equivalent to 0.020 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.</p> <p>1.65 = The conversion factor of ton feed per ton clinker.</p> <p><math>Q_k</math> = The exhaust flow of the kiln (dscf/ton feed).</p> <p><math>Q_c</math> = The exhaust flow of the clinker cooler (dscf/ton feed).</p> <p><math>Q_{ab}</math> = The exhaust flow of the alkali bypass (dscf/ton feed).</p> <p><math>Q_{cm}</math> = The exhaust flow of the coal mill (dscf/ton feed).</p> <p>7000 = The conversion factor for gr per lb.</p>
§63.1343(c)	<p><i>Open clinker storage pile.</i> The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (see § 63.1347 of this subpart), that is appropriate for the site conditions as specified in paragraphs (c)(1) through (3) of this section. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.</p> <p>(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.</p> <p>(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.</p> <p>(3) Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days.</p>

**Emissions limits for affected sources other than kilns; 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; bulk loading or unloading system; raw and finishing mills; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart must not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.
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**Operating limits for kilns. §63.1346**

§63.1346(a)	<p>The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an in-line kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:</p> <p>(1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.</p> <p>(2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.</p> <p>(3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass specified in paragraph (b) of this section and established during the performance test, with or without the raw mill operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.</p>
§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).
§63.1346(g)	<p>During periods of startup and shutdown you must meet the requirements listed in (g)(1) through (4) of this section.</p> <p>(1) During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.</p> <p>(2) Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.</p> <p>(3) 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.</p> <p>(4) You must keep records as specified in §63.1355 during periods of startup and shutdown</p>

### Operation and maintenance plan requirements. §63.1347

§63.1347(a)	<p>You must prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Administrator for review and approval as part of the application for a part 70 permit and must include the following information:</p> <p>(1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits, including fugitive dust control measures for the open clinker piles of §63.1343,63.1345 and 63.1348. Your operations and maintenance plan must address periods of startup and shutdown.</p> <p>(2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);</p> <p>(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.</p>
§63.1347(b)	<p>Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.</p>

### Compliance Requirements. §63.1348

§63.1348(a)	<p><i>Initial Performance Test Requirements.</i> For an affected source subject to this subpart, you must demonstrate compliance with the emissions standards and operating limits by using the test methods and procedures in §§63.1349 and 63.7. 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.</p> <p>Note to paragraph (a): The first day of the 30 operating day performance test is the first day after the compliance date following completion of the field testing and data collection that demonstrates that the CPMS or CEMS has satisfied the relevant CPMS performance evaluation or CEMS performance specification (e.g., PS 2, 12A, or 12B) acceptance criteria. The performance test period is complete at the end of the 30th consecutive operating day. See §63.1341 for definition of operating day and §63.1348(b)(1) for the CEMS operating requirements. The source has the option of performing the compliance test earlier than the compliance date if desired.</p> <p>(1) <i>PM Compliance.</i> If you are subject to limitations on PM emissions under § 63.1343(b), you must demonstrate compliance with the PM emissions standards by using the test methods and procedures in § 63.1349(b)(1).</p> <p>(2) <i>Opacity Compliance.</i> If you are subject to the limitations on opacity under § 63.1345, you must demonstrate compliance with the opacity emissions standards by using the performance test methods and procedures in § 63.1349(b)(2). Use the maximum 6-minute average opacity exhibited during the performance test period to determine whether the affected source is in compliance with the standard.</p> <p>(3) <i>D/F compliance.</i> (i) If you are subject to limitations on D/F emissions under § 63.1343(b), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in § 63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance. The owner or operator of a kiln with an in-line raw mill must demonstrate compliance by conducting separate performance tests while the raw mill is operating and while 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.</p>
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	<p>(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.</p> <p>(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).</p> <p>(iv) If activated carbon injection is used, you must also develop a carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) during the initial performance test and updated during any subsequent performance test conducted under § 63.1349(b)(3) that meets the requirements of § 63.1349(b)(3)(vi). Compliance is demonstrated if the system is maintained within <math>\pm 5</math> percent accuracy during the performance test determined in accordance with the procedures and criteria submitted for review in your monitoring plan required in section 63.1350(p).</p> <p>(4)(i) <i>THC Compliance.</i> 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.</p> <p>(ii) <i>Total Organic HAP Emissions Tests.</i> If you elect to demonstrate compliance with the total organic HAP emissions limit under § 63.1343(b) in lieu of the THC emissions limit, you must demonstrate compliance with the total organic HAP emissions standards by using the performance test methods and procedures in § 63.1349(b)(7).</p> <p>(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.</p> <p>(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.</p> <p>(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 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.</p> <p>(5) <i>Mercury Compliance.</i> 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.</p> <p>(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.</p>
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	<p>(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.</p> <p>(6) <i>HCl Compliance.</i> If you are subject to limitations on HCl emissions under § 63.1343(b), you must demonstrate initial compliance with the HCl standards by using the performance test methods and procedures in § 63.1349(b)(6).</p> <p>(i) For an affected source that is equipped with a wet scrubber, tray tower or dry scrubber, you may demonstrate initial compliance by conducting a performance test as specified in § 63.1349(b)(6)(i). You must determine the HCl concentration for each run and calculate the arithmetic average of the concentrations measured for the three runs to determine compliance. You must also establish appropriate site-specific operational parameter limits.</p> <p>(ii) For an affected source that is not equipped with a wet scrubber, tray tower or dry scrubber, you must demonstrate initial compliance by operating a CEMS as specified in § 63.1349(b)(6)(ii). You must use the average of the hourly HCl values obtained during the first 30 kiln operating days that occur after the compliance date of this rule to determine initial compliance.</p> <p>(7) <i>Commingled Exhaust Requirements.</i> 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:</p> <p>(i) Performing required emissions monitoring and testing on the commingled coal mill and kiln exhaust, or</p> <p>(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 S63.1343(b).</p>
§63.1348(b)	<p>(b) <i>Continuous Monitoring Requirements.</i> You must demonstrate compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§ 63.1350 and 63.8 for each affected source.</p> <p>(1) <i>General Requirements.</i> (i) You must monitor and collect data according to § 63.1350 and the site-specific monitoring plan required by § 63.1350(p).</p> <p>(ii) Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating.</p> <p>(iii) You may not use data recorded during startup and shutdown, monitoring system malfunctions, or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.</p> <p>(iv) <i>Clinker Production.</i> If you are subject to limitations on mercury emissions (lb/MM tons of clinker) under § 63.1343(b), you must determine the hourly production rate of clinker according to the requirements of § 63.1350(d).</p> <p>(2) <i>PM Compliance.</i> If you are subject to limitations on PM emissions under § 63.1343(b), you must use the monitoring methods and procedures in § 63.1350(b) and (d).</p>

	<p>(3) <i>Opacity Compliance.</i> 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.</p> <p>(i) <i>COMS.</i> 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).</p> <p>(ii) Bag leak determination system ( <i>BLDS</i>). If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate compliance using a BLDS that is installed, operated, and maintained in accordance with the requirements of § 63.1350(f)(4)(ii).</p> <p>(4) <i>D/F Compliance.</i> If you are subject to a D/F emissions limitation under § 63.1343(b), you must demonstrate compliance using a CMS that is installed, operated and maintained to record the temperature of specified gas streams in accordance with the requirements of § 63.1350(g).</p> <p>(5)(i) <i>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).</p> <p>(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).</p> <p>(6) <i>THC Compliance.</i> (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).</p> <p>(ii) THC must be measured either upstream of the coal mill or in the coal mill stack.</p> <p>(7) <i>Mercury Compliance.</i></p> <p>(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).</p> <p>(ii) Mercury must be measured either upstream of the coal mill or in the coal mill stack.</p> <p>(8) <i>HCl Compliance.</i> If you are subject to limitations on HCl emissions under § 63.1343(b), you must demonstrate compliance using the performance test methods and procedures in § 63.1349(b)(6).</p> <p>(i) For an affected source that is not equipped with a wet scrubber, tray tower or a dry sorbent injection system, you must demonstrate compliance using the monitoring methods and procedures in § 63.1350(l)(1).</p> <p>(ii) For an affected source that is equipped with a wet scrubber, tray tower or a dry sorbent injection system, you may demonstrate compliance using the monitoring methods and procedures in § 63.1350(l)(2).</p> <p>(iii) HCl may be measured either upstream of the coal mill or in the coal mill stack.</p> <p>(iv) As an alternative to paragraph (b)(8)(ii) of this section, you may use an SO<sub>2</sub> CEMS to establish an SO<sub>2</sub> operating level during your initial and repeat HCl performance tests and monitor the SO<sub>2</sub> level using the procedures in § 63.1350(l)(3).</p>
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	(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)	<p><i>Changes in operations.</i> (1) If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b).</p> <p>(2) In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in (c)(2)(i) through (c)(2)(iv) of this section are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.</p> <p>(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of this section, including when the planned operational change period would begin.</p> <p>(ii) The performance test results must be documented in a test report according to §63.1349(a).</p> <p>(iii) A test plan must be made available to the Administrator prior to performance testing, if requested.</p> <p>(iv) The performance test must be conducted completed within 360 hours after the planned operational change period begins.</p>
§63.1348(d)	<p><i>General duty to minimize emissions.</i> At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.</p>

### Performance testing requirements. §63.1349

§63.1349(a)	<p>Performance test results must be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. As described in §63.7(c)(2)(i), the site-specific plan to be followed during performance testing must be made available to the Administrator prior to testing, if requested.</p> <p>(1) A brief description of the process and the air pollution control system;</p> <p>(2) Sampling location description(s);</p> <p>(3) A description of sampling and analytical procedures and any modifications to standard procedures;</p> <p>(4) Test results;</p> <p>(5) Quality assurance procedures and results;</p> <p>(6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures;</p>
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	<p>(7) Raw data sheets for field sampling and field and laboratory analyses;</p> <p>(8) Documentation of calculations;</p> <p>(9) All data recorded and used to establish parameters for monitoring; and</p> <p>(10) Any other information required by the performance test method.</p>
§63.1349(b)	<p>(1) <i>PM emissions tests.</i> 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).</p> <p>(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.</p> <p>(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.</p> <p>(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.</p> <p>(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 (<i>e.g.</i>, average all your PM CPMS output values for three corresponding Method 5I test runs).</p> <p>(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.</p> <p>(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.</p> <p>(A) Determine your PM CPMS instrument zero output with one of the following procedures:</p> <p>(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.</p>

(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.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 3})$$

Where:

$X_i$  = The PM CPMS data points for the three runs constituting the performance test.

$Y_i$  = 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.

$$R = \frac{Y_i}{(X_i - z)} \quad (\text{Eq. 4})$$

Where:

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

$Y_i$  = The three run average lb/ton-clinker PM concentration.

$X_i$  = 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.

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

Where:

$O_i$  = 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.

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

Where:

$X_i$  = The PM CPMS data points for all runs  $i$ .

$n$  = The number of data points.

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

(v) To determine continuous operating compliance, you must record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for calculations when the source is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average

operating parameter in units of the operating limit (milliamps or the digital equivalent) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 7 to determine the 30 kiln operating day average.

$$30\text{kiln operating day} = \frac{\sum_{i=1}^n Hpvi}{n} \quad (\text{Eq. 7})$$

Where:

Hpvi = The hourly parameter value for hour i.

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

(vi) For each performance test, conduct at least three separate test runs each while the mill is on and the mill is off, under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Conduct each test run to collect a minimum sample volume of 2 dscm for determining compliance with a new source limit and 1 dscm for determining compliance with an existing source limit. Calculate the time weighted average of the results from three consecutive runs, including applicable sources as required by (b)(1)(viii), to determine compliance. You need not determine the particulate matter collected in the impingers ("back half") of the Method 5 or Method 5I particulate sampling train to demonstrate compliance with the PM standards of this subpart. This shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(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.

$$E_{cm} = \frac{E_k + E_b + E_c}{P} \quad (\text{Eq. 8})$$

Where:

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

$E_k$  = Hourly emissions of PM emissions from the kiln, lb.

$E_b$  = Hourly PM emissions from the alkali bypass stack, lb.

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

P = 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) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

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

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

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

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

(iii) 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 §63.13443(b), footnote 2.

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

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

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

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

(4) *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 ppmvd 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:

$$C_{ks} = \frac{(MACT\ Limit \times (Q_{ab} + Q_{cm} + Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm})}{Q_{ks}} \quad \text{(Eq. 9)}$$

Where:

$C_{ks}$  = Kiln stack concentration (ppmvd).

$Q_{ab}$  = Alkali bypass flow rate (volume/hr).

$C_{ab}$  = Alkali bypass concentration (ppmvd).

$Q_{cm}$  = Coal mill flow rate (volume/hr).

$C_{cm}$  = Coal mill concentration (ppmvd).

$Q_{ks}$  = Kiln stack flow rate (volume/hr).

(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 paragraphs (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:

$$E_{30D} = k \frac{\sum_{i=1}^n C_i Q_i}{P} \quad (\text{Eq. 10})$$

Where:

$E_{30D}$  = 30-day rolling emission rate of mercury, lb/MM tons clinker.

$C_i$  = Concentration of mercury for operating hour  $i$ ,  $\mu\text{g}/\text{scm}$ .

$Q_i$  = Volumetric flow rate of effluent gas for operating hour  $i$ , where  $C_i$  and  $Q_i$  are on the same basis (either wet or dry),  $\text{scm}/\text{hr}$ .

$k$  = Conversion factor, 1 lb/454,000,000  $\mu\text{g}$ .

$n$  = Number of kiln operating hours in the previous 30 kiln operating day period where both  $C$  and  $Q_i$  qualified data are available.

$P$  = Total runs from the previous 30 days of clinker production during the same time period as the mercury emissions measured, million tons.

(6) *HCl emissions tests.* For a source subject to limitations on HCl emissions you must conduct performance testing by one of the following methods:

(i)(A) If the source is equipped with a wet scrubber, tray tower or dry scrubber, you must conduct performance testing using Method 321 of appendix A to this part unless you have installed a CEMS that meets the requirements § 63.1350(l)(1). For kilns with inline raw mills, testing should be conducted for the raw mill on and raw mill off conditions.

(B) You must establish site specific parameter limits by using the CPMS required in § 63.1350(l)(1). For a wet scrubber or tray tower, measure and record the pressure drop across the scrubber and/or liquid flow rate and pH in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average pressure drop, pH, and average scrubber water flow rate for each sampling run in which the applicable emissions limit is met. For a dry scrubber, measure and record the sorbent injection rate in intervals of no more than 15 minutes during the HCl test. Compute and record the 24-hour average sorbent injection rate and average sorbent injection rate for each sampling run in which the applicable emissions limit is met.

(ii)(A) If the source is not controlled by a wet scrubber, tray tower or dry sorbent injection system, you must operate a CEMS in accordance with the requirements of § 63.1350(l)(1). See § 63.1348(a).

(B) The initial compliance test must be based on the 30 kiln operating days that occur after the compliance date of this rule in which the affected source operates using a HCl CEMS. Hourly HCl concentration data must be obtained according to § 63.1350(l).

(iii) As an alternative to paragraph (b)(6)(i)(B) of this section, you may choose to monitor  $\text{SO}_2$  emissions using a CEMS in accordance with the requirements of § 63.1350(l)(3). You must establish an  $\text{SO}_2$  operating limit equal to the highest 1 hour average recorded during the HCl stack test where the HCl stack test run result demonstrates compliance with the emission limit. This operating limit will apply only for demonstrating HCl compliance.

(iv) 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 HCl limit using Equation 11:

$$C_{ks} = \frac{(MACT \text{ Limit} \times (Q_{ab} + Q_{cm} + Q_{ks})) - (Q_{ab} \times C_{ab}) - (Q_{cm} \times C_{cm})}{Q_{ks}} \quad (\text{Eq. 11})$$

Where:

$C_{ks}$  = Kiln stack concentration (ppmvd).

$Q_{ab}$  = Alkali bypass flow rate (volume/hr).

$C_{ab}$  = Alkali bypass concentration (ppmvd).

$Q_{cm}$  = Coal mill flow rate (volume/hr).

$C_{cm}$  = Coal mill concentration (ppmvd).

$Q_{ks}$  = Kiln stack flow rate (volume/hr).

(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 calculated. You must establish your THC operating limit and determine compliance with it according to paragraphs (b)(7)(vii) through (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 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 (7)(vii)(A) and (B) of this section.

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

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n X_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n Y_i \quad (\text{Eq. 12})$$

Where:

$\bar{x}$  = The THC CEMS average values in ppmvw.

$X_i$  = The THC CEMS data points for all three runs  $i$ .

$Y_i$  = The sum of organic HAP concentrations for test runs  $i$ . and

$n$  = The number of data points.

(B) You must use your three run average THC CEMS value, and your three run average organic HAP concentration from your three 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.

$$T_1 = \left( \frac{9}{\bar{Y}_1} \right) \cdot X_1 \quad (\text{Eq. 13})$$

Where:

$T_1$  = The 30-day operating limit for your THC CEMS, ppmvw.

$\bar{Y}_1$  = The average organic HAP concentration from Eq. 12, ppmv.

$X_1$  = The average THC CEMS concentration from Eq. 12, ppmvw.

(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.

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

Where:

$X_{1i}$  = The THC CEMS data points for all runs  $i$ .

$n$  = The number of data points.

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

(x) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating ("mill on") and while the raw mill is not operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with Equation 15.

$$R = (y \cdot t) + (x \cdot (1-t)) \quad (\text{Eq. 15})$$

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.

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

Where:

$H_{pvi}$  = 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 re-establish your site-specific THC emissions limit.

(8) HCl Emissions Tests with  $\text{SO}_2$  Monitoring. If you choose to monitor  $\text{SO}_2$  emissions using a CEMS to demonstrate HCl compliance, follow the procedures in (b)(8)(i) through (ix) of this section and in accordance with the requirements of § 63.1350(l)(3). You must establish an  $\text{SO}_2$  operating limit equal to the average recorded during the HCl stack test. This operating limit will apply only for demonstrating HCl compliance.

(i) Use Method 321 of appendix A to this part to determine emissions of HCl. 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 one hour.

(ii) At the same time that you are conducting the performance test for HCl, you must also determine a site-specific  $\text{SO}_2$  emissions limit by operating an  $\text{SO}_2$  CEMS in accordance with the requirements of § 63.1350(l). The duration of the performance test must be three hours and the average  $\text{SO}_2$  concentration (as calculated from the average output) during the 3-hour test must be calculated. You must establish your  $\text{SO}_2$  operating limit and determine compliance with it according to paragraphs (b)(8)(vii) and (viii) of this section.

(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  $\text{SO}_2$  levels measured during raw mill on and raw mill off testing.

(iv) Your  $\text{SO}_2$  CEMS must be calibrated and operated according to the requirements of § 60.63(f).

(v) Your  $\text{SO}_2$  CEMS measurement scale must be capable of reading  $\text{SO}_2$  concentrations consistent with the requirements of § 60.63(f), including mill on or mill off operation.

(vi) If your kiln has an inline kiln/raw mill, you must conduct separate performance tests while the raw mill is operating ("mill on") and while the raw mill is not operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the HCl levels measured during raw mill on and raw mill off compliance testing with Equation 17.

$$R = (y \cdot t) + x \cdot (t-1) \quad (\text{Eq. 17})$$

Where:

$R$  = Operating limit as  $\text{SO}_2$ , ppmvw.

y = Average SO<sub>2</sub> CEMS value during mill on operations, ppmvw.  
 t = Percentage of operating time with mill on, expressed as a decimal.  
 x = Average SO<sub>2</sub> CEMS value during mill off operations, ppmvw.  
 t-1 = Percentage of operating time with mill off, expressed as a decimal.

(vii) If the average of your three HCl compliance test runs is below 75 percent of your HCl emission limit, you may as a compliance alternative, calculate an operating limit by establishing a relationship of SO<sub>2</sub> CEMS signal to your HCl concentration corrected to 7 percent O<sub>2</sub> by using the SO<sub>2</sub> CEMS instrument zero, the average SO<sub>2</sub> CEMS values corresponding to the three compliance test runs, and the average HCl concentration from the HCl compliance test with the procedures in (b)(8)(vii)(A) through (D) of this section.

(A) Determine your SO<sub>2</sub> CEMS 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 may 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 probe-flood introduction of high purity nitrogen or certified zero air free of SO<sub>2</sub>.
- (4) If none of the steps in paragraphs (b)(8)(vii)(A)(1) through (3) of this section are possible, you must use a zero output value provided by the manufacturer.

(B) Determine your SO<sub>2</sub> CEMS instrument average ppm, and the average of your corresponding three HCl compliance test runs, using equation 18.

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i, \bar{y} = \frac{1}{n} \sum_{i=1}^n y_i \quad (\text{Eq. 18})$$

Where:

X<sub>1</sub> = The SO<sub>2</sub> CEMS data points for the three runs constituting the performance test.

Y<sub>1</sub> = The HCl emission concentration expressed as ppmv corrected to 7 percent O<sub>2</sub> for the three runs constituting the performance test.

n = The number of data points.

(C) With your instrument zero expressed in ppmv, your three run average SO<sub>2</sub> CEMS expressed in ppmv, and your three run HCl compliance test average in ppm corrected to 7 percent O<sub>2</sub>, determine a relationship of ppm HCl corrected to 7 percent O<sub>2</sub> per ppm SO<sub>2</sub> with Equation 19.

$$R = \frac{Y_1}{(X_1 - z)} \quad (\text{Eq. 19})$$

Where:

R = The relative HCl ppmv corrected to 7 percent O<sub>2</sub> per ppm SO<sub>2</sub> for your SO<sub>2</sub> CEMS.

Y<sub>1</sub> = The three run average HCl concentration corrected to 7 percent O<sub>2</sub>.

X<sub>1</sub> = The three run average ppm recorded by your SO<sub>2</sub> CEMS.

z = The instrument zero output ppm value.

(D) Determine your source specific 30-day rolling average operating limit using ppm HCl corrected to 7 percent O<sub>2</sub> per ppm SO<sub>2</sub> value from Equation 19 in Equation 20, below. This sets your operating limit at the SO<sub>2</sub> CEMS ppm value corresponding to 75 percent of your emission limit.

$$O_1 = z + \frac{0.75(L)}{R} \quad (\text{Eq. 20})$$

Where:

O<sub>1</sub> = The operating limit for your SO<sub>2</sub> CEMS on a 30-day rolling average, in ppmv.

L = Your source HCl emission limit expressed in ppmv corrected to 7 percent O<sub>2</sub>.

z = Your instrument zero in ppmv, determined from (1)(i).

R = The relative oxygen corrected ppmv HCl per ppmv SO<sub>2</sub>, for your SO<sub>2</sub> CEMS, from Equation 19.

(viii) To determine continuous compliance with the SO<sub>2</sub> operating limit, you must record the SO<sub>2</sub> CEMS output data for all periods when the process is operating and the SO<sub>2</sub> CEMS is not out-of-control. You must demonstrate continuous compliance by using all quality-assured hourly average data collected by the SO<sub>2</sub> CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the

	<p>operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 21 to determine the 30 kiln operating day average.</p> $30\text{kiln operating day} = \frac{\sum_{i=1}^n Hpvi}{n} \quad (\text{Eq. 21})$ <p>Where:  Hpvi = The hourly parameter value for hour i, ppmvw.  n = The number of valid hourly parameter values collected over 30 kiln operating days.</p> <p>(ix) Use EPA Method 321 of appendix A to part 60 of this chapter to determine HCl 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.</p> <p>(x) If the SO<sub>2</sub> level exceeds by 10 percent or more your site-specific SO<sub>2</sub> 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 SO<sub>2</sub> CEMS measurements to within the established value;  (B) Within 90 days of the exceedance or at the time of the periodic compliance test, whichever comes first, conduct another performance test to determine compliance with the HCl limit and to verify or re-establish your site-specific SO<sub>2</sub> emissions limit</p>
§63.1349(c)	<p><i>Performance test frequency.</i> Except as provided in §63.1348(b), performance tests are required for affected sources that are subject to a dioxin, total organic HAP, or HCl, emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS. Tests for PM are repeated within 11 to 13 months after the previous performance test.</p>
§63.1349(d)	<p><i>Performance test reporting requirements.</i></p> <p>(1) You must submit the information specified in paragraphs (d)(1)(i) and (d)(2) of this section no later than 60 days following the initial performance test. All reports must be signed by the facility's manager.</p> <p>(i) The initial performance test data as recorded under paragraph (b) of this section.</p> <p>(ii) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(3), (b)(4)(iii), (b)(5)(ii), and (b)(6)(i) of this section, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.</p> <p>(2) As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT) ( see <a href="http://www.epa.gov/ttn/chief/ert/ert_tool.html/">http://www.epa.gov/ttn/chief/ert/ert_tool.html/</a>).</p>
§63.1349(e)	<p>Performance tests must be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests.</p>

**Monitoring requirements. §63.1350**

§63.1350(a)	<p>(1) Following the compliance date, the owner or operator must demonstrate compliance with this subpart on a continuous basis by meeting the requirements of this section.</p> <p>(2) Reserved.</p> <p>(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.</p> <p>(4) Any instance where the owner or operator fails to comply with the continuous monitoring requirements of this section is a violation.</p>
§63.1350(b)	<p><i>PM monitoring requirements.</i> (1)(i) PM CPMS. You will use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit. You will conduct your performance test using Method 5 or Method 5I at appendix A-3 to part 60 of this chapter. You will use the PM CPMS to demonstrate continuous compliance with this operating limit. You must repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in § 63.1349(b)(1) (i) through (vi) of this subpart. You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration.</p> <p>(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.</p> <p>(iii) For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit, you must:</p> <p>(A) Within 48 hours of the exceedance, visually inspect the APCD;</p> <p>(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</p> <p>(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.</p> <p>(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.</p>
§63.1350(d)	<p><i>Clinker production monitoring requirements.</i> In order to determine clinker production, you must:</p> <p>(1) Determine hourly clinker production by one of two methods:</p> <p>(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within <math>\pm 5</math> percent accuracy.</p>

	<p>(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within <math>\pm 5</math> percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.</p> <p>(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).</p> <p>(3) Record the daily clinker production rates and kiln feed rates; and</p> <p>(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.</p>
§63.1350(f)	<p><i>Opacity monitoring requirements.</i> If you are subject to a limitation on opacity under §63.1345, you must conduct required opacity monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (vii) of this section and in accordance with your monitoring plan developed under § 63.1350(p). You must also develop an opacity monitoring plan in accordance with paragraphs (p)(1) through (4) and paragraph (o)(5), if applicable, of this section.</p> <p>(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.</p> <p>(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.</p> <p>(iii) If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.</p> <p>(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 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.</p> <p>(v) Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring under this paragraph. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.</p> <p>(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test, of appendix A-7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.</p> <p>(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.</p>

	<p>(2)(i) For a raw mill or finish mill, you must monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A-7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes.</p> <p>(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.</p> <p>(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (f)(2)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (f)(2)(i) of the section, you must then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes.</p> <p>(3) If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (2) of this section, you must initiate, within one-hour, the corrective actions specified in your operation and maintenance plan as required in § 63.1347.</p> <p>(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 COMS or BLDS.</p> <p>(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visible emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.</p> <p>(ii) If you choose to install a BLDS in lieu of conducting the daily visible emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply.</p>
63.1350(g)	<p><i>D/F monitoring requirements.</i> If you are subject to an emissions limitation on D/F emissions, you must comply with the monitoring requirements of paragraphs (g)(1) through (g)(6) and paragraphs (m)(1) through (m)(4) of this section to demonstrate continuous compliance with the D/F emissions standard. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) You must install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PMCDs.</p> <p>(i) The temperature recorder response range must include zero and 1.5 times the average temperature established according to the requirements in §63.1349(b)(3)(iv).</p> <p>(ii) The calibration reference for the temperature measurement must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.</p> <p>(iii) The calibration of all thermocouples and other temperature sensors must be verified at least once every three months.</p> <p>(2) You must monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill, and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.</p> <p>(3) The required minimum data collection frequency must be one minute.</p>

	<p>(4) Calculate the rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. See § 63.1349(b)(3).</p> <p>(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.</p>
§63.1350(i)	<p><i>THC Monitoring Requirements.</i> If you are subject to an emissions limitation on THC emissions, you must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) You must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 or Performance Specification 8A 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. For THC continuous emission monitoring systems certified under Performance Specification 8A, conduct relative accuracy test audits required under procedure 1 in accordance with Performance Specification 8, Sections 8 and 11 using Method 25A in appendix A to 40 CFR part 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, Section 13.2.</p> <p>(2) Performance tests on alkali bypass and coal mill stacks must be conducted using Method 25A in appendix A to 40 CFR part 60 and repeated every 30 months.</p>
§63.1350(j)	<p><i>Total organic HAP monitoring requirements.</i> If you are complying with the total organic HAP emissions limits, you must continuously monitor THC according to paragraph (i)(1) and (2) or in accordance with Performance Specification 8 or Performance Specification 8A of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. In addition, you must follow the monitoring requirements in paragraphs (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p>
§63.1350(k) & (l)	<p><i>Mercury Monitoring Requirements.</i> 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.</p> <p>(1) You must use a span value for any Hg CEMS that represents the mercury concentration corresponding to approximately two times the emissions standard and may be rounded up to the nearest multiple of 5 µg/m<sup>3</sup> 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.</p>

(2) In order to quality assure data measured above the span value, you must use one of the three options in paragraphs (k)(2)(i) through (iii) of this section. Where the options in paragraphs (k)(2)(i) through (iii) are employed while the kiln is operating in a mill-off mode, the “above span” described in paragraph (k)(2)(iii) may substitute for the daily upscale calibration provided the data normalization process in paragraph (k)(2)(iii) are not required. If data normalization is required, the normal daily upscale calibration check must be performed to quality assure the operation of the CEMS for that day. In this particular case, adjustments to CEMS normally required by Procedure 5 when a daily upscale does not meet the 5 percent criterion are not required, unless paragraph (k)(2)(iii) of this section data normalization is necessary and a subsequent normal daily calibration check demonstrates the need for such adjustment.

(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  $5 \mu\text{g}/\text{m}^3$  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  $\pm 10$  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  $\pm 20$  percent of the certified value of the reference gas must be normalized using Equation 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 one-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 below. Only one “above span” calibration is needed per 24 hour period.

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} \times \text{Measured stack gas result}$$

$$= \text{Normalized stack gas result} \quad (\text{Eq. 22})$$

(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  $>1 \mu\text{g}/\text{dscm}$ ,  $\leq 10\%$  of section 1 mass;

(ii) For stack Hg concentrations  $\leq 1 \mu\text{g}/\text{dscm}$  and  $>0.5 \mu\text{g}/\text{dscm}$ ,  $\leq 20\%$  of section 1 mass;

(iii) For stack Hg concentrations  $\leq 0.5 \mu\text{g}/\text{dscm}$  and  $>0.1 \mu\text{g}/\text{dscm}$ ,  $\leq 50\%$  of section 1 mass; and



<p>(iv) For stack Hg concentrations <math>\leq 0.1</math> <math>\mu\text{g/dscm}</math>, no breakthrough criterion assuming all other QA/QC specifications are met.</p> <p>(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.</p> <p>(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:</p> <p>(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.</p> <p>(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, the exhaust gas flow rate and hourly mercury emission rate to calculate hourly mercury emissions in lb/hr.</p> <p>(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.</p> <p>(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.</p> <p>(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).</p> <p><i>(l) HCl Monitoring Requirements.</i> If you are subject to an emissions limitation on HCl emissions in § 63.1343, you must monitor HCl emissions continuously according to paragraph (l)(1) or (2) and paragraphs (m)(1) through (4) of this section or, if your kiln is controlled using a wet or dry scrubber or tray tower, you alternatively may parametrically monitor SO<sub>2</sub> emissions continuously according to paragraph (l)(3) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (4) of this section.</p> <p>(1) If you monitor compliance with the HCl emissions limit by operating an HCl CEMS, you must do so in accordance with Performance Specification 15 (PS 15) of appendix B to part 60 of this chapter, or, upon promulgation, in accordance with any other performance specification for HCl CEMS in appendix B to part 60 of this chapter. You must operate, maintain, and quality assure a HCl CEMS installed and certified under PS 15 according to the quality assurance requirements in Procedure 1 of appendix F to part 60 of this chapter except that the Relative Accuracy Test Audit requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of PS 15. When promulgated, if you choose to install and operate an HCl CEMS in accordance with PS 18 of appendix B to part 60 of this chapter, you must operate, maintain and quality assure the HCl CEMS using the associated Procedure 6 of appendix F to part 60 of this chapter. For any performance specification that you use, you must use Method 321 of appendix A to part 63 of this chapter as the reference test method for conducting relative accuracy testing. The span value and calibration requirements in paragraphs (l)(1)(i) and (ii) of this section apply to HCl CEMS other than those installed and certified under PS 15.</p> <p>(i) You must use a measurement span value for any HCl CEMS of 0-10 ppmvw unless the monitor is installed on a kiln without an inline raw mill. Kilns without an inline raw mill may use a higher span value</p>
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sufficient to quantify all expected emissions concentrations. The HCl CEMS data recorder output range must include the full range of expected HCl concentration values which would include those expected during “mill off” conditions. The corresponding data recorder range shall be documented in the site-specific monitoring plan and associated records.

(ii) In order to quality assure data measured above the span value, you must use one of the three options in paragraphs (l)(1)(ii)(A) through (C) of this section.

(A) Include a second span that encompasses the HCl emission concentrations expected to be encountered during “mill off” conditions. This second span may be rounded to a multiple of 5 ppm of total HCl. The requirements of the appropriate HCl monitor performance specification shall be followed for this second span with the exception that a RATA with the mill off is not required.

(B) Quality assure any data above the span value by proving instrument linearity beyond the span value established in paragraph (l)(1)(i) 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 the applicable performance specification 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 HCl CEMS falls within 10 percent of the certified value of the reference gas. If the value measured by the HCl 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 HCl CEMS to service, or data above span from the HCl CEMS must be subject to the quality assurance procedures established in paragraph (l)(1)(ii)(D) of this section. Any HCl CEMS above span linearity challenge response exceeding  $\pm 20$  percent of the certified value of the reference gas requires that all above span hourly averages during the week following the above span linearity challenge must be normalized using Equation 23.

(C) Quality assure any data above the span value established in paragraph (l)(1)(i) of this section using the following procedure. Any time two consecutive one-hour average measured concentration of HCl exceeds the span value you must, within 24 hours before or after, introduce a higher, “above span” HCl reference gas standard to the HCl CEMS. The “above span” reference gas must meet the requirements of the applicable performance specification and 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 HCl CEMS is within 20 percent of the certified value of the reference gas. If the value measured by the HCl CEMS is not within 20 percent of the certified value of the reference gas, then you must normalize the stack gas values measured above span as described in paragraph (l)(1)(ii)(D) of this section.

(D) In the event that the “above span” calibration is not successful (*i.e.*, the HCl CEMS measured value is not within 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 HCl CEMS response to the reference gas as shown in Equation 23:

$$\frac{\text{Certified reference gas value}}{\text{Measured value of reference gas}} \times \text{Measured stack gas result}$$

$$= \text{Normalized stack gas result} \quad (\text{Eq. 23})$$

Only one “above span” calibration is needed per 24-hour period.

(2) Install, operate, and maintain a CMS to monitor wet scrubber or tray tower parameters, as specified in paragraphs (m)(5) and (7) of this section, and dry scrubber, as specified in paragraph (m)(9) of this section.

(3) If the source is equipped with a wet or dry scrubber or tray tower, and you choose to monitor SO<sub>2</sub> emissions, monitor SO<sub>2</sub> emissions continuously according to the requirements of §60.63(e) and (f) of part 60 subpart F of this chapter. If SO<sub>2</sub> levels increase above the 30-day rolling average SO<sub>2</sub> operating limit

	<p>established during your performance test, you must:</p> <p>(i) As soon as possible but no later than 48 hours after you exceed the established SO<sub>2</sub> value conduct an inspection and take corrective action to return the SO<sub>2</sub> emissions to within the operating limit; and</p> <p>(ii) Within 60 days of the exceedance or at the time of the next compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl emissions limit and to verify or re-establish the SO<sub>2</sub>CEMS operating limit</p>
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§63.1350(m)	<p><i>Parameter monitoring requirements.</i> If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.</p> <p>(1) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.</p> <p>(2) You must conduct all monitoring in continuous operation at all times that the unit is operating.</p> <p>(3) Determine the 3-hour block average of all recorded readings.</p> <p>(4) Record the results of each inspection, calibration, and validation check.</p> <p>(5) <i>Liquid flow rate monitoring requirements.</i> If you have an operating limit that requires the use of a flow measurement device, you must meet the requirements in paragraphs (m)(5)(i) through (iv) of this section.</p> <p>(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow.</p> <p>(ii) Use a flow sensor with a measurement sensitivity of 2 percent of the flow rate.</p> <p>(iii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.</p> <p>(iv) Conduct a flow sensor calibration check at least semiannually.</p> <p>(6) <i>Specific pressure monitoring requirements.</i> If you have an operating limit that requires the use of a pressure measurement device, you must meet the requirements in paragraphs (m)(6)(i) through (vi) of this section.</p> <p>(i) Locate the pressure sensor(s) in a position that provides a representative measurement of the pressure.</p> <p>(ii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.</p> <p>(iii) Use a gauge with a minimum tolerance of 1.27 centimeters of water or a transducer with a minimum tolerance of 1 percent of the pressure range.</p> <p>(iv) Check pressure tap pluggage daily.</p> <p>(v) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.</p> <p>(vi) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.</p> <p>(7) <i>Specific pH monitoring requirements.</i> 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.</p> <p>(i) Locate the pH sensor in a position that provides a representative measurement of scrubber effluent pH.</p> <p>(ii) Ensure the sample is properly mixed and representative of the fluid to be measured.</p> <p>(iii) Check the pH meter's calibration on at least two points every 8 hours of process operation.</p> <p>(9) <i>Mass flow rate (for sorbent injection) monitoring requirements.</i> 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.</p>
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	<p>(i) Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate.</p> <p>(ii) Install and calibrate the device in accordance with manufacturer's procedures and specifications.</p> <p>(iii) At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications.</p> <p>(10) <i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p> <p>(11) For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:</p> <p>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</p> <p>(ii) Sealing off defective bags or filter media;</p> <p>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</p> <p>(iv) Sealing off a defective fabric filter compartment;</p> <p>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</p> <p>(vi) Shutting down the process producing the PM emissions.</p>
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§63.1350(n)	<p><i>Continuous emissions rate monitoring system.</i> You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) through (10) of this section, for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit and that is required to be monitored by a CEMS..</p> <p>(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 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.</p>
	<p>(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.</p> <p>(3) [Reserved]</p> <p>(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)(2) of this section.</p> <p>(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.</p> <p>(6) The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period.</p> <p>(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).</p> <p>(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).</p> <p>(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.</p> <p>(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.</p> <p>(i) The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system.</p> <p>(ii) The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data.</p> <p>(9) You must verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified in paragraph (n)(8).</p> <p>(10) You must operate the flow rate monitoring system and record data during all periods of operation of the affected facility including periods of startup, shutdown, and malfunction, except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments).</p>

§63.1350(o)	<p><i>Alternate monitoring requirements approval.</i> You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.</p> <p>(1) The Administrator will not approve averaging periods other than those specified in this section, unless you document, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.</p> <p>(2) If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.</p> <p>(3) You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (o)(3)(i) through (iii) of this section:</p> <p>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;</p> <p>(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and</p> <p>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.</p> <p>(4) The Administrator will notify you of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:</p> <p>(i) Notice of the information and findings upon which the intended disapproval is based; and</p> <p>(ii) Notice of opportunity for you to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for you to provide additional supporting information.</p> <p>(5) You are responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves you of the responsibility to comply with any provision of this subpart.</p> <p>(6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.</p>
§63.1350(p)	<p><i>Development and submittal (upon request) of monitoring plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (p)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (n) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph (o)(5) of this section.</p> <p>(1) For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (o)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.</p>

	<p>(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p> <p>(5) <i>BLDS monitoring plan.</i> Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;</p> <p>(i) Installation of the BLDS;</p> <p>(ii) Initial and periodic adjustment of the BLDS, including how the alarm set-point will be established;</p> <p>(iii) Operation of the BLDS, including quality assurance procedures;</p> <p>(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;</p> <p>(v) How the BLDS output will be recorded and stored.</p>
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### Additional test methods. § 63.1352

§63.1352	<p>(a) If you are conducting tests to determine the rates of emission of HCl from kilns and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under § 63.1340, you may use Method 320 or Method 321 of appendix A of this part.</p> <p>(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.</p>
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### Notification Requirements. §63.1353

§63.1353(a)	<p>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.</p>
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§63.1353(b)	<p>Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:</p> <p>(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.</p> <p>(2) Notification of performance tests, as required by §§63.7 and 63.9(e).</p> <p>(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).</p> <p>(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.</p> <p>(5) Notification of compliance status, as required by §63.9(h).</p> <p>(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.</p>
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### Reporting Requirements. §63.1354

§63.1354(a)	<p>(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.</p>
§63.1354(b)	<p>The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:</p> <p>(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.</p> <p>(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.</p> <p>(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.</p>
	<p>(4)-(5) Reserved</p> <p>(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.</p> <p>(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).</p>

	<p>(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.</p> <p>(9) The owner or operator shall submit a summary report semiannually to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<a href="http://www.epa.gov/cdx">www.epa.gov/cdx</a>).) 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 Web site (<a href="http://www.epa.gov/ttn/chief/cedri/index.html">http://www.epa.gov/ttn/chief/cedri/index.html</a>), 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 to 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 reports must be submitted by the deadline specified in this subpart, 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:</p> <ul style="list-style-type: none"> <li>(i) All exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b);</li> <li>(ii) Notification of any failure to calibrate thermocouples and other temperature sensors as required under §63.1350(g)(1)(iii) of this subpart; and</li> <li>(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).</li> <li>(iv) Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3).</li> <li>(v) Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a).</li> <li>(vi) For each PM CPMS, HCl, Hg, and THC CEMS, D/F temperature monitoring system, 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.</li> <li>(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.</li> <li>(viii) 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 (b)(9) 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.</li> <li>(ix) 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 (<i>e.g.</i> 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.</li> </ul>
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	<p>(x) All reports required by this subpart not subject to the requirements in paragraphs (b)(9) introductory text and (b)(9)(viii) 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 (b)(9) introductory text and (b)(9)(viii) of this section in paper format.</p> <p>(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.</p> <p>(c) Reporting a failure to meet a standard due to a malfunction. 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 volume 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.</p>
§63.1354(c)	<p>Reporting a failure to meet a standard due to a malfunction. 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 volume 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.</p>

### Recordkeeping Requirements. §63.1355

§63.1355(a)	<p>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.</p>
§63.1355(b)	<p>The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and</p> <p>(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;</p> <p>(2) All records of applicability determination, including supporting analyses; and</p> <p>(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.</p>
§63.1355(c)	<p>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).</p>

§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) & (h)	<p>You must keep records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.</p> <p>(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with § 63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> <p>(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.</p>

### Implementation and enforcement. § 63.1358

§63.1358	<p>(a) This subpart can be implemented and enforced by the U.S. EPA, or a delegated authority such as the applicable State, local, or Tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or Tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. Contact the applicable U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or Tribal agency.</p> <p>(b) In delegating implementation and enforcement authority of this subpart to a State, local, or Tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of U.S. EPA and cannot be transferred to the State, local, or Tribal agency.</p> <p>(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.</p> <p>(1) Approval of alternatives to the requirements in §§63.1340, 63.1342 through 63.1348, and 63.1351.</p> <p>(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.</p> <p>(3) Approval of major alternatives to monitoring under §63.8(f), as defined in §63.90, and as required in this subpart.</p> <p>(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f), as defined in §63.90, and as required in this subpart.</p>
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**FEDERAL REGULATIONS  
NESHAP SUBPART ZZZZ**

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

**Requirements for Existing Emergency RICE Rated Less than 500 HP at a Major Source of HAP – 40  
CFR 63 Subpart ZZZZ – Commenced Construction before June 12, 2006**

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

**[73 FR 3603, Jan. 18, 2008]**

**General Requirements**

§63.6605	<p>1. You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times. [40 CFR 63.6605(a)]</p> <p>2. 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. [40 CFR 63.6605(b)]</p>
§63.6665	<p>Table 8 to Subpart ZZZZ of 40 CFR part 63 shows which parts of the General Provisions in 40 CFR 63.1 through 63.15 apply to you. [40 CFR 63.6665]</p>
§63.6590	<p>Any new emergency RICE (commence construction on or after December 19, 2002) greater than 500 HP, that is not contractually obligated to operate for more than 15 hours as specified in 40 CFR 63.6640(f), must submit an Initial Notification but is otherwise not affected by the requirements of 40 CFR 63 Subpart ZZZZ. Your notification should include the information in 40 CFR 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). [40 CFR 6590(b)(1)(i), 40 CFR 63.6645(f)]</p>

## **Work Practice Standards**

§63.6602	<p>Each existing emergency RICE (commenced construction before June 12, 2006) with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions, must comply with the applicable requirements in Table 2c to Subpart ZZZZ of 40 CFR part 63. [40 CFR 63.6602]</p> <ul style="list-style-type: none"> <li>a. Compression ignition engines must [Table 2c, Item 1 to Subpart ZZZZ of 40 CFR part 63]: <ul style="list-style-type: none"> <li>i. Change oil and filter every 500 hours of operation or annually, whichever comes first.</li> <li>ii. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;</li> <li>iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</li> </ul> </li> <li>b. Spark ignition engines must [Table 2c, Item 6 to Subpart ZZZZ of 40 CFR part 63]: <ul style="list-style-type: none"> <li>i. Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>ii. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;</li> <li>iii. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.</li> </ul> </li> </ul>
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## **Monitoring and Recordkeeping Requirements**

§63.6625	<ul style="list-style-type: none"> <li>1. You must operate and maintain the existing emergency 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. [40 CFR 63.6625(e)(2)]</li> <li>2. You must install a non-resettable hour meter on existing emergency RICE if one is not already installed. [40 CFR 63.6625(f)]</li> <li>3. 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. [40 CFR 63.6625(g)]</li> <li>4. You have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c to Subpart ZZZZ of 40 CFR part 63. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c. The analysis program must be conducted and implemented according to 40 CFR 63.6625(i) for CI engines and according to 40 CFR 63.6625(i) for SI RICE. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i) and (j)]</li> </ul>
§63.6640	<p>In order for the engine to be considered an emergency stationary RICE, you must operate the emergency RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). If you do not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]</p>

§63.6655	<p>1. You must keep records of the maintenance conducted on the existing emergency RICE in order to demonstrate that you operated and maintained the RICE and after-treatment control device (if any) according to your own maintenance plan. [40 CFR 63.6655(e)]</p> <p>2. You must keep records of the hours of operation of the existing emergency RICE 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 engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]</p>
§63.6660	<p>You must maintain records consistent with 40 CFR 63.10(b): Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. You must keep each record readily accessible in hard copy or electronic form. [40 CFR 63.6660, 40 CFR 63.10(b)]</p>

### **Reports and Notifications**

§63.6650	<p>1. You must report each instance in which you did not meet each applicable operating limitation in Table 2c to Subpart ZZZZ of 40 CFR part 63. These instances are deviations from the emission and operating limitations in this subpart. These deviations must be reported according to the requirements in 40 CFR 63.6650. [40 CFR 63.6640(b)]</p> <p>2. You must submit the reports in Table 7, Item 3 to Subpart ZZZZ of 40 CFR part 63, if applicable:</p> <ul style="list-style-type: none"> <li>a. Emergency stationary RICE that operate or are contractually obligated to be available for more than 15 hours per year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operate for the purposes specified in 40 CFR 63.6640(f)(4)(ii) <ul style="list-style-type: none"> <li>i. The report must contain The information in 40 CFR 63.6650(h)(1).</li> <li>ii. You must submit the report annually according to the requirements in 40 CFR 63.6650(h)(2)-(3). [40 CFR 63.6650]</li> </ul> </li> </ul>
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## **Appendix A**

### **PSD Permit Conditions (NSR 4-4-11, SE 95-01)**

#### **I. Permit Expiration**

This approval to Construct/Modify shall become invalid (1) if construction is not commenced (as defined in 40 CFR 52.21 ((b)(8))) within 18 months after the approval takes effect, (2) if construction is discontinued for a period of 18 months or more, or (3) if construction is not completed within a reasonable time.

#### **II. Notification of Commencement of Construction and Startup**

The Regional Administrator shall be notified in writing of the anticipated date of initial startup (as defined in 40 CFR 60.2(o)) of each facility of the source not more than sixty (60) days nor less than thirty (30) days prior to such date and shall be notified in writing of the actual date of commencement of construction and startup within fifteen (15) days after such date.

#### **III. Facility Operation**

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

#### **IV. Malfunction**

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

#### **V. Right to Entry**

The Regional Administrator, the head of the State Air Pollution Control Agency, the head of the responsible local Air Pollution Control Agency, and/or their authorized representative, upon the presentation of credentials, shall be permitted:

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



- B. At reasonable time to have access to an copy any records required to be kept under the terms and conditions of the Approval to Construct/Modify; and
- C. To inspect any equipment, operation, or method required in this Approval to Construct/Modify
- D. To sample emissions from the source.

## **VI Transfer of Ownership**

In the event of any changes in control or ownership of facilities to be constructed or modified, this Approval to Construct/Modify shall be binding on all subsequent owners and operators. This applicant shall notify the succeeding owner and operator of the existence of this Approval to Construct/Modify and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator and the State and local Air Pollution Control Agency.

## **VII. Severability**

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

## **VIII Other Applicable Regulations**

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

## **IX. Paperwork Reduction Act**

Any requirements established by this permit for the gathering and reporting if information are not subject to review by the Office of Management and Budget (“OMB”) under the Paperwork Reduction Act because this permit is not an “information collection request” within the meaning of 44 U.S.C.350(4)&(11), 3507, 3512 and 32518.

Futhermore, this permit and any information gathering and reporting requirements established by this permit are exempt from OMB review under the Paperwork Reduction Act because it is directed to fewer than ten persons. 44 U.S.C. 3502(4), (11), 5 C.F.R. 1320.5(a).

## **X. Special Conditions**

### **A. Certification**

NCCC shall notify the EPA in writing of compliance with Special Condition X.B and X.H and shall make such notification within fifteen (15) days of such compliance. This letter must be signed by the responsible representative of NCCC.

## **B. Air Pollution Control Equipment**

NCCC shall install, continuously operate and maintain the following air pollution controls to minimize emissions. Controls listed shall be fully operational upon startup of the proposed equipment.

1. All point source emissions shall be controlled by baghouse type controls.
2. All raw materials transfer and crushing points upstream of kiln with potential to emit dust shall be provided with water sprays with sufficient water volume to eliminate visible emissions.
3. Particulate control of haul roads shall be no less than 79.6% and shall be achieved by application of water or District-approved dust palliative(s). Visible fugitive dust emissions from all haul roads shall not exceed 10% opacity.

## **C. Performance Tests**

1. Within sixty (60) days of achieving maximum production rate of proposed equipment but not later than one hundred eighty (180) days after effective date of this permit, and at such other times as specified by District, National Cement shall conduct performance tests for NO<sub>x</sub>, NO<sub>2</sub>, CO, and SO<sub>2</sub> and furnish District a written report of results of such tests. Tests for NO<sub>x</sub>, CO, and SO<sub>2</sub> shall be conducted on an annual basis as close as possible to maximum operating capacity of facilities being tested. Upon written request from National Cement, District may approve conducting of performance tests at a lower specified production rate. After initial performance tests and upon written request and adequate justification from National Cement, District may waive a specified annual test for facility.
2. Performance tests for emissions of NO<sub>x</sub>, NO<sub>2</sub>, CO, and SO<sub>2</sub> shall be conducted and results reported in accordance with test methods set forth in 40 CFR 60, Part 60.8 and Appendix A. following test methods shall be used:
  - a. Performance tests for emissions of NO<sub>x</sub> and NO<sub>2</sub> shall be conducted using EPA Methods 1-4 and 7E.
  - b. Performance tests for emissions of SO<sub>2</sub> shall be conducted using EPA Methods 1-4 and 8.
  - c. Performance tests for emissions CO shall be conducted using EPA Methods 1-4 and 10.

District shall be notified in writing at least thirty (30) days prior to such test to allow time for development of an approvable performance test plan and to arrange for an observer to be present at test.

Such prior approval shall minimize possibility of District rejection of test results for procedural deficiencies. In lieu of abovementioned test methods, equivalent methods may be used with prior written approval from District.

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

#### **D. Emission Limits for Nitrogen Dioxide**

On and after the date of this permit (Original: of startup), NCCC shall not discharge or cause the discharge into the atmosphere NO<sub>2</sub> in excess of 3.4 lbs/ton of clinker (30-day average) and 361.25 lb/hr (24-hour average) from the kiln stack (assumes 75% NO<sub>2</sub> to NO<sub>x</sub> ratio). Enforcement of this condition shall be based on NO<sub>x</sub>, CEM and NO<sub>2</sub> to NO<sub>x</sub> ratio from most recent performance test.

EPA may set a new lower allowable emission rate for the above emission limits after reviewing the performance test results or the initial NO<sub>2</sub> monitoring data required under the Special Conditions C and H.

If the NO<sub>2</sub> emission limit is revised, the difference between the NO<sub>2</sub> emission limit set forth above and a revised lower NO<sub>2</sub> emission limit shall be allowed as an emission offset for future construction or modification.

#### **E. Emission Limits for CO**

On and after the date of startup, NCCC shall not discharge or cause to discharge into the atmosphere CO in excess of the following amounts from kiln stack:

1. 3,000 lbs/hr (3-hour rolling average)
2. 2,000 lbs/hr (8-hour rolling average)
3. 1,200 lbs/hr (24-hour average)

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 Conditions C and H.

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.

#### **F. Emission Limits for Sulfur Dioxide**

On or after the date of startup, NCCC shall not discharge or cause to discharge into the atmosphere SO<sub>2</sub> in exceeds of 53.83 lbs/hr (3-hour average) from the kiln stack.

EPA may set a new lower allowable emission rate for the above emission limits after reviewing the performance test results or the initial SO<sub>2</sub> monitoring data required under Special Conditions C and H.

If the SO<sub>2</sub> emission limit is revised, the difference between the SO<sub>2</sub> emission limit set forth above and a revised lower SO<sub>2</sub> emission limit shall not be allowed as an emission offset for future construction or modification.

### **G. Fuel Use and Operating Limits**

1. NCCC shall only burn coal, petroleum coke, tire derived fuel (TDF), natural gas and/or fuel oil in the kiln/preheater system. The maximum allowed TDF weight % is 50% of entire fuel mix, quarterly basis.
2. NCCC shall record and maintain records of the amounts of clinker produced, the plant hours of operation, the amounts and type of fuel combusted, and TDF weight % each calendar quarter. All information shall be recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, calculation and record.

### **H. Continuous Emission Monitoring**

1. Prior to the date of startup and thereafter, NCCC shall install, maintain and operate the following continuous emission monitoring systems in the main kiln stack:
  - a. Continuous monitoring systems to measure stack gas NO<sub>x</sub>, CO and SO<sub>2</sub> concentrations. The systems 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. The system shall meet EPA performance specification (40 CFR Part 52, Appendix E)
2. NCCC 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, reports and records.
3. NCCC shall notify EPA (Attention AIR-3) of the date on which the demonstration for the continuous monitoring system performance commences (40 CFR 60.13(c)). This date shall be within sixty (60) days of achieving maximum production rate of the proposed equipment but no later than 180 days after effective date of this permit (Original: initial startup of the equipment as defined in 40 CFR 60.2(o))
4. NCCC shall submit a written report of all excess emissions to EPA (Attention: 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, and malfunctions of the kiln exhaust system. The nature and cause of 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 and 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 of NO<sub>2</sub> shall be defined as any 24-hour or 30-day period during which average NO<sub>2</sub> emissions, as measured by CEM, and using most recent measurement of NO<sub>2</sub> to NO<sub>x</sub> ratio, exceeds maximum emission limits set forth in Condition X.D. Excess emission of CO and SO<sub>2</sub>, as measured by CEM, exceeds maximum emission limits set forth in Conditions X.E. and X.F.
5. Excess emission indicated by the CEM system shall be considered violations of the applicable emission limit for the purpose of this permit.
  6. Prior to date of startup of the facility, NCCC shall prepare a quality assurance project plan for the certification and operation of the continuous emission monitors. Such a plan shall conform to the EPA quality assurance requirements of 40 CFR 60, Appendix F.

#### **I. New Source Performance Standards**

The proposed 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.

#### **XI. Agency Notification**

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

### Greenhouse Gas Facility Wide Reporting

GHGs are reported as CO<sub>2</sub>e for facility-wide Actual Emissions.

#### Reported for the year 2022

Facility-Wide GHG Emissions	
CO <sub>2</sub> e (tpy):	961,648

Carbon Dioxide Equivalent, CO<sub>2</sub> Equivalent (CO<sub>2</sub>e): Measure for comparing carbon dioxide with other GHGs, based on the quantity of those gases multiplied by the appropriate Global Warming Potential (GWP).

#### Global Warming Potentials

Greenhouse Gases	GWP	CO <sub>2</sub> e (tpy)
Carbon dioxide (CO <sub>2</sub> )	1	956,994
Nitrous oxide (N <sub>2</sub> O)	21	3,100
Methane (CH <sub>4</sub> )	310	1,554
Hydrofluorocarbons (HFCs)	**	-
Perfluorocarbons (PFCs)	**	-
Sulfur Hexafluoride (SF <sub>6</sub> )	23,900	-

\*\*GWP varies based on each pollutant.

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