

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

Permit No: 1128-V-2000

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

Permit No: 1128-V-2000

Issuance Date:

Expiration Date: March 29, 2016

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 Rules and Regulations as authorized by the California Health and Safety Code, 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 U.S. EPA and Eastern Kern Air Pollution Control District. Those provisions which are not required by the CAAA are considered to be Eastern Kern provisions and are not federally enforceable by U.S. EPA.

By:

David L. Jones
Air Pollution Control Officer

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General Permit Conditions

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

| | Federally Enforceable Conditions | Reg/Rule |
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| 1. | <p><u>Inspections</u></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><u>Stack Monitoring</u></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><u>Source Sampling</u></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 (PM₁₀) 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><u>Equipment Breakdown</u></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 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 5. | <p><u>Severability</u></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><u>Conditional Approval</u></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 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 7. | <p><u>Standards for Authority to Construct</u></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"> 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); 2) The change is not subject to any requirements under Title IV of the Clean Air Act; 3) The change is not a Title I modification; and 4) The change does not violate an applicable requirement of the Clean Air Act or a federally enforceable term or condition of this permit. <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 |
| 8. | <p><u>Prevention of Significant Deterioration (PSD)</u></p> <p>Source will be subject to District Rule 210.4, Prevention of Significant Deterioration (PSD) if major modifications are made.</p> | Reg. II, Rule 210.4 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 9. | <p><u>Permit Fees</u></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><u>Payment of Supplemental Fee</u></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> |
| 10. | <p><u>Greenhouse Gas Fee</u></p> <p>Any stationary source that has actual GHG emissions, in the prior calendar year, greater than or equal to 100,000 tons of CO₂e, as calculated in accordance with 40 CFR Part 98, shall pay a Consumer Price Index (CPI) adjusted GHG fee per ton of CO₂e being emitted. Sources subject to this Rule shall submit an annual report of GHG emissions to the District no later than the thirty-first day of March.</p> | <p>Reg. III, Rule 301.4</p> |
| 11. | <p><u>Visible Emissions</u></p> <p><u>Limits</u></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> | <p>Reg. IV, Rule 401</p> |

| | Federally Enforceable Conditions | Reg/Rule |
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| 12. | <p><u>Particulate Matter Concentration - Desert Basin</u></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 |
| 13. | <p><u>Particulate Matter - Emission Rate</u></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 |
| 14. | <p><u>Process Weight - Portland Cement Kilns</u></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 |
| 15. | <p><u>Sulfur Compounds</u></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 (SO₂).</p> | Reg. IV, Rule 407 |
| 16. | <p><u>Fuel Burning Equipment - Combustion Contaminants</u></p> <p>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> | Reg. IV, Rule 409 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 17. | <p><u>Organic Solvents</u></p> <p>A person shall not discharge into the atmosphere more organic materials in any one day from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent is utilized unless the emissions are controlled or reduced as outlined in the organic solvent rule (410).</p> | Reg. IV, Rule 410 |
| 18. | <p><u>Disposal and Evaporation of Solvents</u></p> <p>A person shall not during any one day disposed of a total of more than 1½ gallons of any photochemically reactive solvent as defined in Rule 410.X, or of any material containing more than 1½ gallons of any such photochemically reactive solvent into the atmosphere.</p> | Reg. IV, Rule 410.2 |
| 19. | <p><u>Organic Solvent Degreasing Operation</u></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 |
| 20. | <p><u>Storage of Organic Liquids</u></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 |
| 21. | <p><u>Gasoline Transfer into Stationary Storage Containers, Delivery Vessels and Bulk Plants</u></p> <p>A person shall not transfer gasoline into storage or delivery vessels unless provisions are made to recover 95% of the displaced vapors.</p> | Reg. IV, Rule 412 |
| 22. | <p><u>Transfer of Gasoline into Vehicle Fuel Tanks</u></p> <p>No person shall transfer gasoline into vehicle fuel tanks unless CARB-Certified Phase II dispensing equipment is utilized and maintained in correct working order.</p> | Reg. IV, Rule 412.1 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 23. | <p><u>Nuisance</u></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 |
| 24. | <p><u>Federal New Source Performance Standards (NSPS)</u></p> <p>Provisions of Part 60, Chapter 1, Title 40, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All new and modified sources shall comply with standards, criteria and requirements set forth therein.</p> <p>All applicable requirements of 40 CFR Part 60, Subparts A, F, Y, and IIII apply to this facility.</p> <p>Subpart F, 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 |
| 25. | <p><u>National Emission Standards for Hazardous Air Pollutants and Source Categories (NESHAPS)</u></p> <p>Provisions of Title 40, Chapter 1, Parts 61 and 63, Code of Federal Regulations, in effect September 5, 1996, are hereby adopted by reference and made a part hereof. All sources of hazardous air pollution shall comply with applicable standards, criteria and requirements set forth herein.</p> <p>All applicable requirements of 40 CFR Part 61, Subpart M and 40 CFR Part 63, Subparts A, LLL, and ZZZZ apply to this facility.</p> <p>For the purposes of 40 CFR Part 63, Subpart LLL, “Significant Change” is defined as the use by the facility of a fuel or alternate raw material that is a Federally regulated hazardous waste. The normal use of District approved fuels and/or fuel blends and District approved raw materials or raw material blends does not constitute a “significant change” in operation of the facility.</p> <p>For the purposes of 40 CFR Part 63, Subpart ZZZZ, “Stationary Reciprocating Internal Combustion Engines” You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.</p> | Reg. IV, Rule 423 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 26. | <p><u>Compliance Certification</u></p> <p>The owner/operator shall comply with the following procedures for compliance certification:</p> <ul style="list-style-type: none"> A. Submittal of a compliance certification by the owner or operator to the U.S. EPA and copy to the APCO within 60 days after end of compliance certification period; B. Compliance certification period shall begin April 1 of each year and end March 31 of the following year; C. Such compliance certification shall identify the basis for each permit term or condition, e.g., specify the emissions limitation, standard or work practice, and a means of monitoring compliance with the term or condition; D. Such compliance certification shall include compliance status and method(s) used to determine compliance for the current time period and over entire reporting period; and E. Such compliance certification shall include any additional inspection, monitoring or entry requirement promulgated pursuant to Sections 114(a) and 504(b) of the CAA. <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 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 27. | <p><u>Compliance with Permit Conditions</u></p> <p>A. Permittee shall comply with all permit conditions;</p> <p>B. Permit does not convey any property rights or any exclusive privilege;</p> <p>C. Non-compliance with any permit condition shall be grounds for permit termination, revocation and reissuance, modification, enforcement action or denial of permit renewal;</p> <p>D. Permittee shall not use “need to halt or reduce a permitted activity in order to maintain compliance” as a defense for non-compliance with any permit condition;</p> <p>E. Pending permit action or notification of anticipated non-compliance does not stay any permit condition; and</p> <p>F. Within a reasonable time period, permittee shall furnish any information requested by the APCO, in writing, for purpose of determining: 1) compliance with the permit, or 2) whether or not cause exists for a permit or enforcement action.</p> | Reg. II, Rule 201.1 |
| 28. | <p><u>Emergency Provisions</u></p> <p>A. The permittee shall comply with the requirements of Rule 111 and the emergency provisions contained in all permit streamlining requirements imposed in accordance with Subsection VI.J. all District-only rules which apply in accordance with Subsection VI.K.1. and all applicable federal requirements not subsumed by such permit streamlining requirement(s) or District-only rules;</p> <p>B. Within two weeks of an emergency event, an owner or operator of the source shall submit to the District a properly signed, contemporaneous log or other relevant evidence which demonstrates that:</p> <ol style="list-style-type: none"> 1) An emergency occurred; 2) The permittee can identify the cause(s) of the emergency; 3) The facility was being properly operated at the time of the emergency; 4) All steps were taken to minimize the emissions resulting from the emergency; and 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; <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 Section VII. B.12 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 29. | <p><u>Record Keeping</u></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"> 1.) Date, place, and time of sampling; 2.) Operating conditions at time of sampling; 3.) Date, place, and method of analysis; and 4.) Results of analysis; <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 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 30. | <p><u>Reporting</u></p> <p>A. Any non-conformance with permit requirements, including any attributable to emergency conditions (as defined in Rule 201.1) shall be promptly reported to the APCO and in accordance with Rule 111;</p> <p>B. Monitoring report shall be submitted at least every six months identifying any non-conformance with permit requirements, including any previously reported to the APCO;</p> <p>C. All reports of non-conformance with permit requirements shall include probable cause of non-conformance and any preventative or corrective action taken;</p> <p>D. Progress report shall be made on a compliance schedule at least semi-annually and including:</p> <ol style="list-style-type: none"> 1) Date when compliance will be achieved, 2) Explanation of why compliance was not, or will not be achieved by the scheduled date, and 3) Log of any preventative or corrective action taken; and <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 |
| 31. | <p><u>Referencing of District and Applicable Requirements</u></p> <p>Pursuant to Rule 201.1.VII.C. District hereby references the following documents which are clearly identified and available to the District and to the public:</p> <p>A. Plant modernization project; and</p> <p>B. Each Authority to Construct file for new equipment and each Authority to Construct file to modify existing equipment.</p> <p>These files contain title, document number, applicant, and date received. Also included in these files are rule citations, engineering evaluations, and final documents all related to the existing permit conditions and emissions limits set forth in this permit.</p> | Reg. II, Rule 201.1 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 32. | <p><u>Right of Entry</u></p> <p>The source shall allow entry of District, CARB, or U.S. EPA officials for purpose of inspection and sampling, including:</p> <p>A. Inspection of the stationary source, including equipment, work practices, operations, and emission-related activity;</p> <p>B. Inspection and duplication of records required by the permit to operate; and</p> <p>C. Source sampling or other monitoring activities.</p> | Reg. II, Rule 201.1 |
| 33. | <p><u>Permit Life</u></p> <p>The life of this permit shall be five years from the date of issuance.</p> | Reg. II, Rule 201.1 Section VII. B.15 |
| 34. | <p><u>Administrative Permit Amendment and Minor Permit Modification</u></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 |
| 35. | <p><u>Applicability of Federally Enforceable Conditions</u></p> <p>Federally Enforceable Conditions <u>do not apply</u> to the following permit sections: Equipment Descriptions, and any Design Conditions, Operational Conditions, Special Conditions, or Compliance Testing Requirements designated as District only. Federally Enforceable Conditions <u>shall apply</u> to Design Conditions, Operational Conditions, Special Conditions, Compliance Testing Requirements, and Emission Limits except as noted above.</p> | Reg. II, Rule 201.1 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 36. | <p><u>Periodic Monitoring</u></p> <p><u>Non-Point</u></p> <p>National Cement shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all non-point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any non-point source and that source is not operating under breakdown condition as defined in and allowed for in District Rule 111, 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><u>Point</u></p> <p>National Cement shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all point sources. This testing will be the basis for determining compliance with the visible emission standard in District Rule 401. If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with the visible emission standard. If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 111, 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 |

| | Federally Enforceable Conditions | Reg/Rule |
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| 36. | <p><u>Additional Monitoring</u></p> <p>Diesel standby and emergency piston engines do not require opacity monitoring if utilizing California diesel or other low-sulfur, low aromatic fuel. Fuel records shall be kept for verification purposes and an operational log for hours of operation.</p> <p>All control equipment shall be inspected annually for proper operation. 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"> A. Identification of stack or emission point being monitored; B. Operational conditions at the time of monitoring; C. Records of any monitoring conducted, including records of emission or operational parameter values and the date, place and time of sampling or measurement; and D. Where corrective action is triggered, description of the corrective action and the date, time and results of any corrective action. <p><u>Testing</u></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> | |

| | Federally Enforceable Conditions | Reg/Rule |
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| 36. | <p><u>Monitoring, Testing, Record Keeping Requirements</u> (Applies to EU 004) (Portland Cement Kilns - Oxides of Nitrogen)</p> <p>Continuous NO_x emissions monitoring system records and clinker production records for the cement kiln shall be maintained at the facility for a period of at least five years and made readily available to District personnel.</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_x concentration in ppm to tons per day at standard conditions of 68° F and a gas pressure of 29.92 inches of mercury:</p> $\frac{Tons \cdot NO_x}{day} = (ppmv \cdot NO_x) \times \left(\frac{46 \text{ grams}}{mole} \right) \times (1.56 \times 10^{-7}) \left(\frac{dscf}{min} \right) \times (0.0120)$ <p><u>Monitoring, Testing, Record Keeping Requirements</u> (Applies to EU 018) (Gasoline Storage - Phase I)</p> <p>A. Compliance with the vapor recovery requirements of District Rule 412 shall be demonstrated using California Air Resources Board (CARB) Method 201.1 or 201.1a upon installation and as directed by the Air Pollution Control Officer;</p> <p>B. True vapor pressure shall be determined using Reid vapor pressure ASTM Method No. D-323-82 at storage temperature; and</p> <p>C. The test method to determine vapor tightness of delivery vessels shall be EPA Method 27.</p> | Reg. IV, Rule 412 |

| | Federally Enforceable Conditions | Reg/Rule |
|-----|---|-----------------------------|
| 36. | <p><u>Monitoring, Testing, Record Keeping Requirements</u> (Applies to EU 018) (Gasoline Storage & Dispensing - Phase II)</p> <p>Verification that each CARB-certified Phase II Vapor Recovery System meets or exceeds the requirements of tests specified in District Rule 412.1, Subsection V.C. shall be maintained. These test results shall be dated and shall contain the names, addresses, and telephone numbers of person(s) responsible for system installation and testing.</p> <p>Facility shall be pressure tested to determine proper installation and function before startup, and thereafter as directed by the Control Officer if not consistently operated leak-free or a major modification is implemented.</p> <p>Tests shall be conducted in accordance with test procedures found in CARB's "Test Procedures for Determination of the Efficiency of Gasoline Vapor Recovery Systems at Service Stations".</p> | Reg. IV, Rule 412.1 |
| 37. | <p><u>Clean Air Act</u></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) |
| 38. | <p><u>National Emission Standard for Asbestos</u></p> <p>Permittee shall comply with the requirements of Sections 61.145 through 61.147 of the National Emission Standard for Asbestos for all demolition and renovation projects.</p> | 40 CFR 61, Subpart M |
| 39. | <p><u>Protection of Stratospheric Ozone</u></p> <p>Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR §82.156.</p> <p>Equipment used during maintenance, service, repair, or disposal of appliances must meet the standards for recycling and recovery equipment in accordance with 40 CFR §82.158.</p> <p>Persons performing maintenance, service, repair or disposal of appliances must be certified by a certified technician pursuant to 40 CFR §82.161.</p> | 40 CFR Part 82 |

List of Insignificant Air Pollutant Emitting Equipment

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

Space Heating Equipment

Welding Equipment

Portable IC Engines - California Registered

Small IC Engines < 50 bhp

Boilers & Heaters < 5 MM Btu/hr

Air Conditioning Equipment

Atomic Absorption

Bunsen Burners

Inductively Coupled Plasma

Steam Cleaners, Natural Gas

Water Heaters, Natural Gas

Motor Vehicles as Defined in the CH&SC

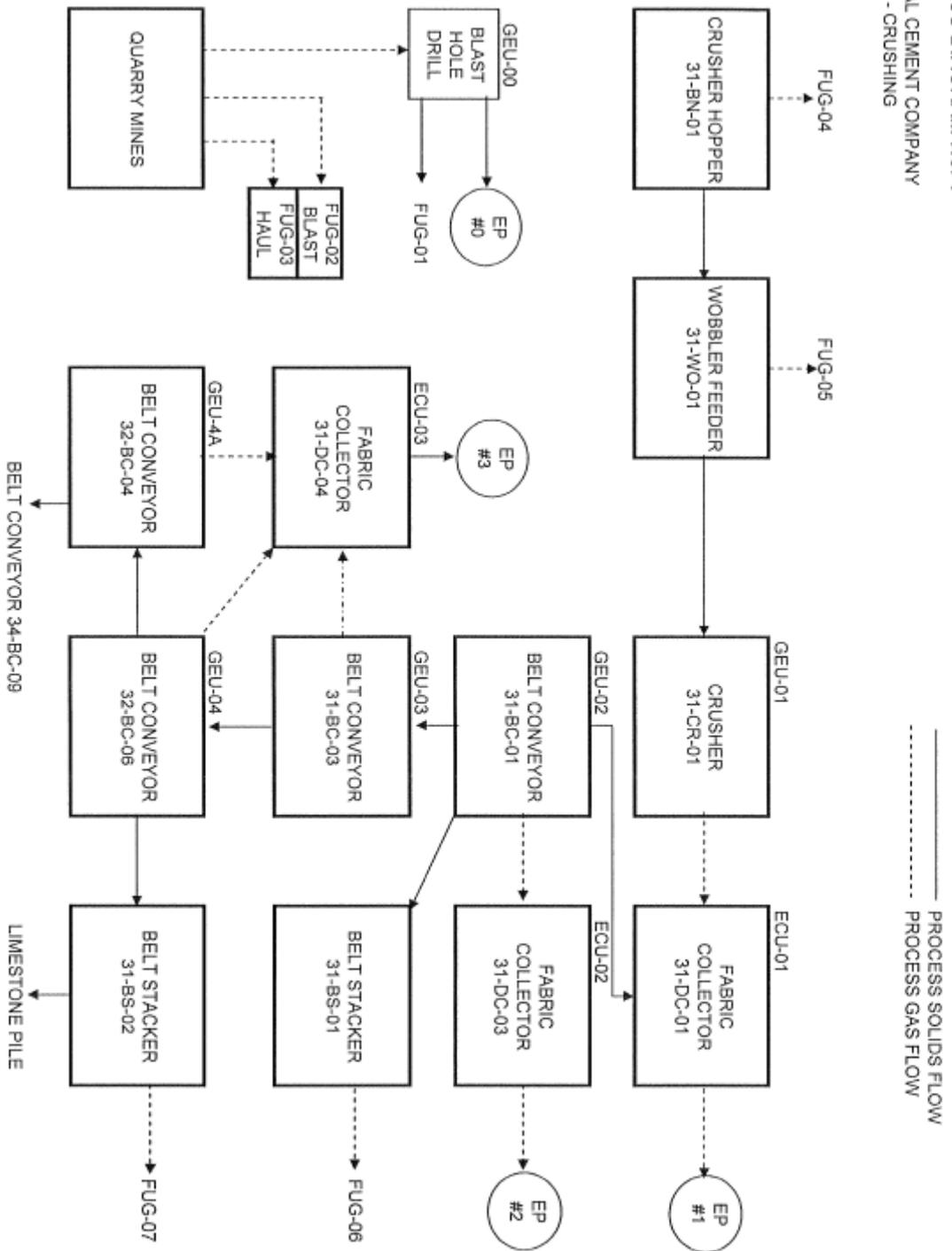
Spectro Photometer

Above Ground Fuel Oil Storage Tanks

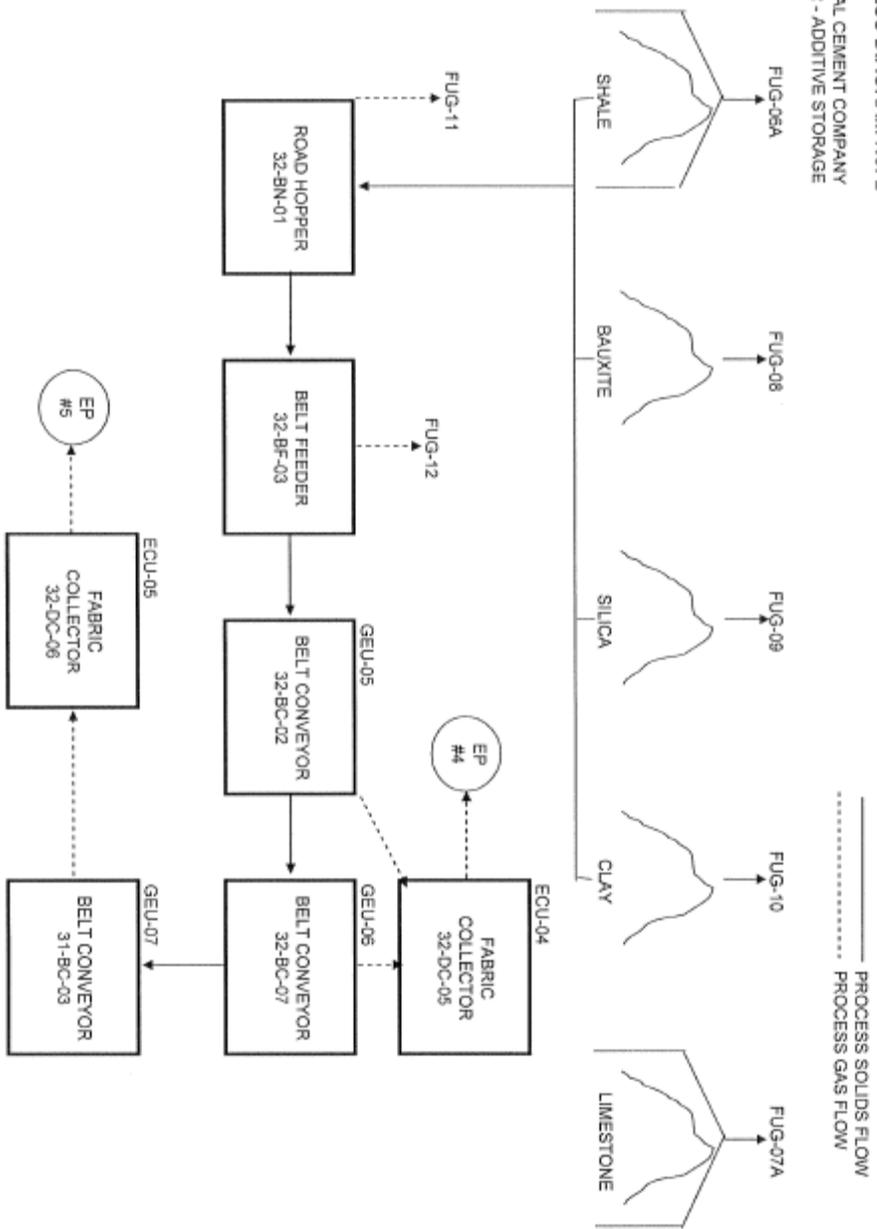
Below Ground Diesel Storage Tanks

Small Degreaser

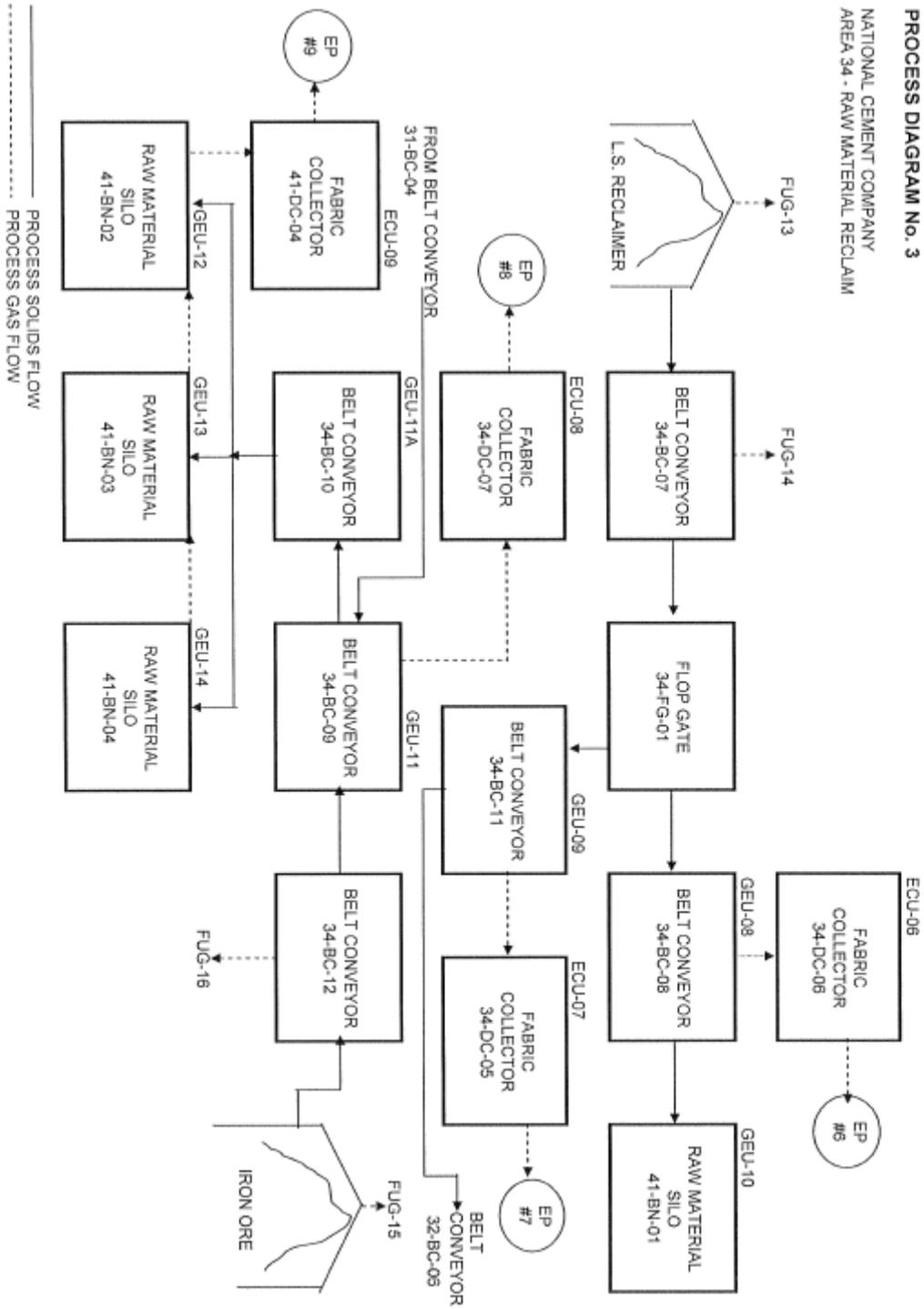
PROCESS DIAGRAM No. 1
 NATIONAL CEMENT COMPANY
 AREA 31 - CRUSHING



PROCESS DIAGRAM No. 2
NATIONAL CEMENT COMPANY
AREA 32 - ADDITIVE STORAGE

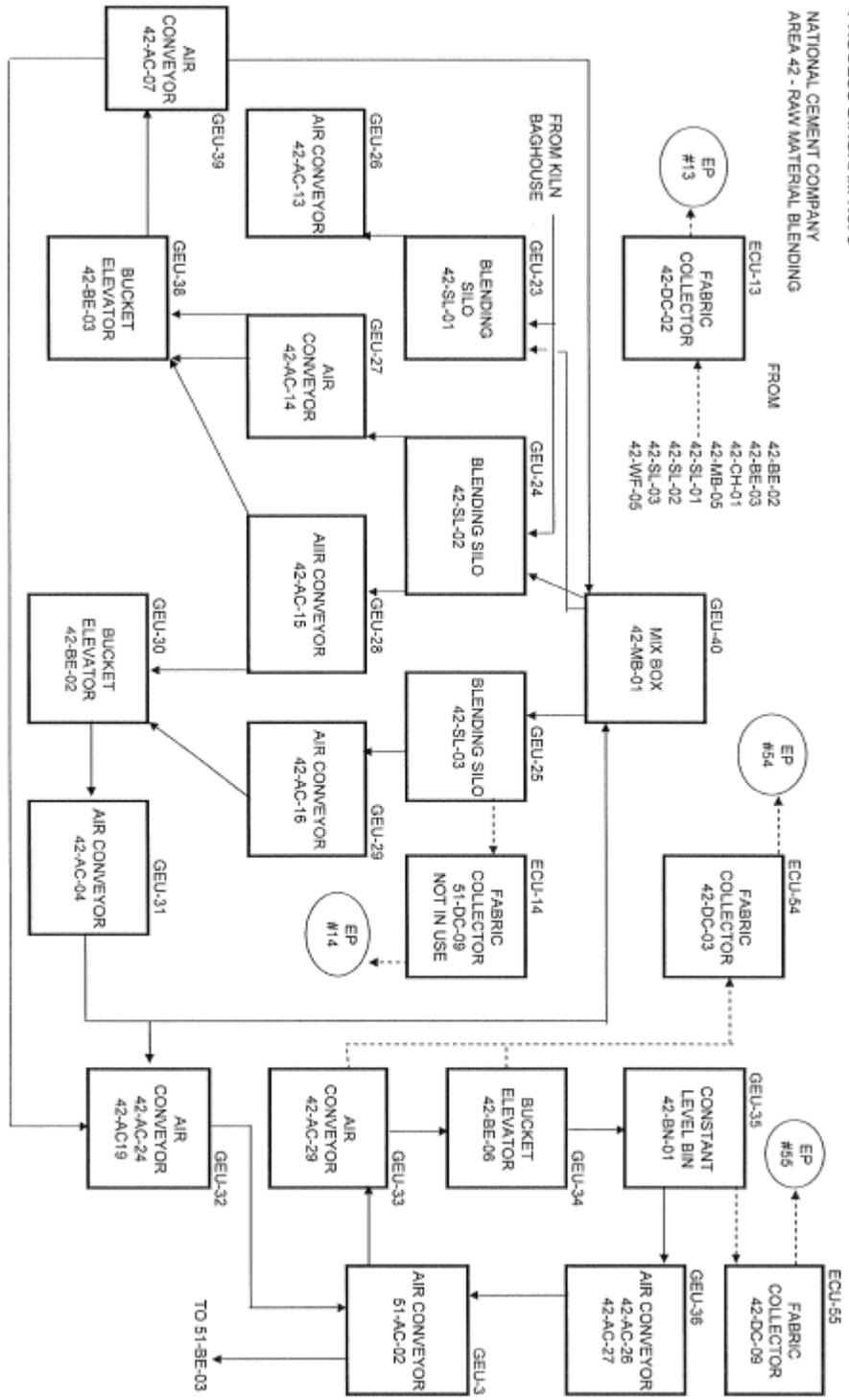


PROCESS DIAGRAM No. 3
 NATIONAL CEMENT COMPANY
 AREA 34 - RAW MATERIAL RECLAIM



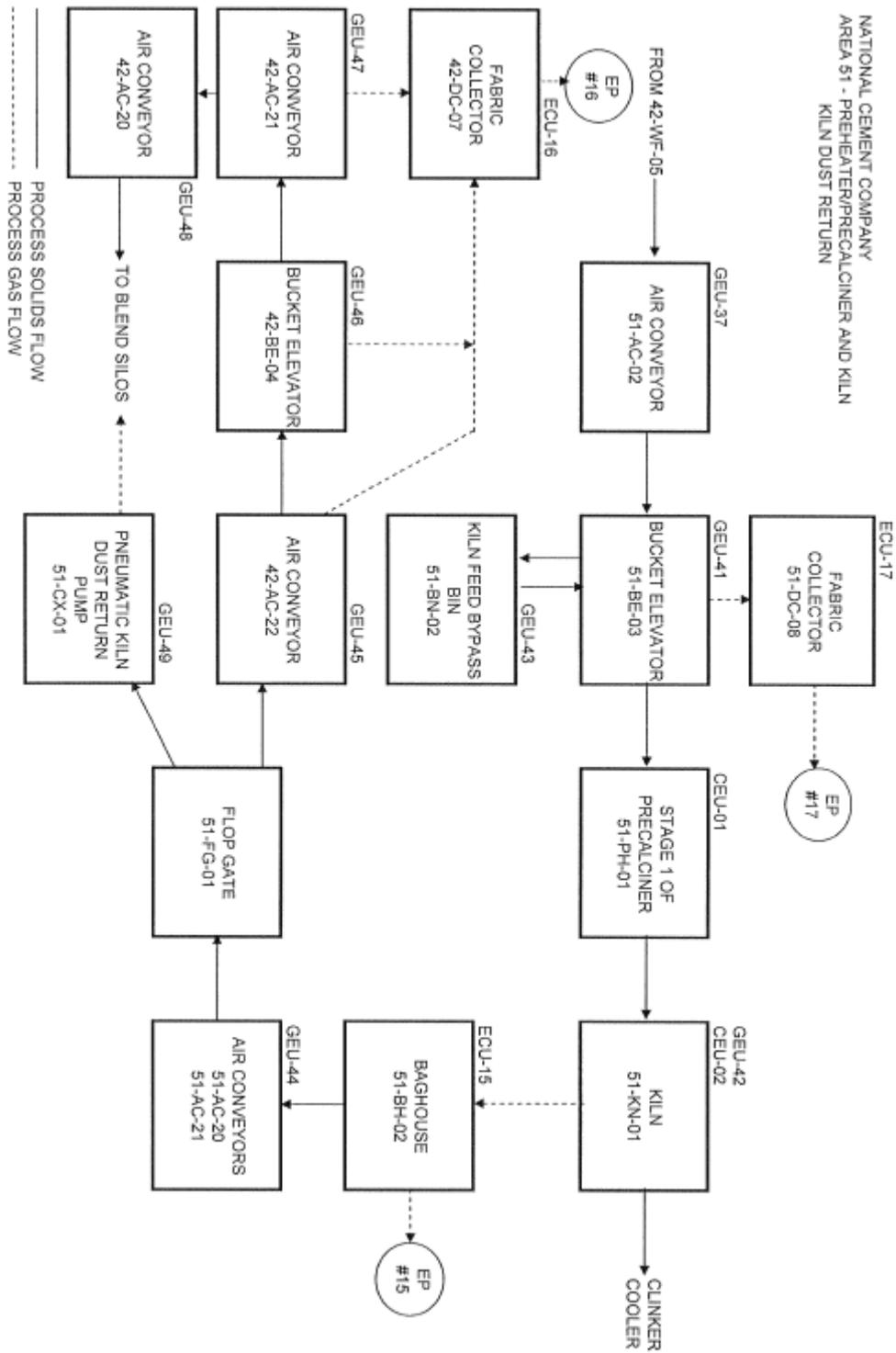
PROCESS DIAGRAM No. 5

NATIONAL CEMENT COMPANY
AREA 42 - RAW MATERIAL BLENDING

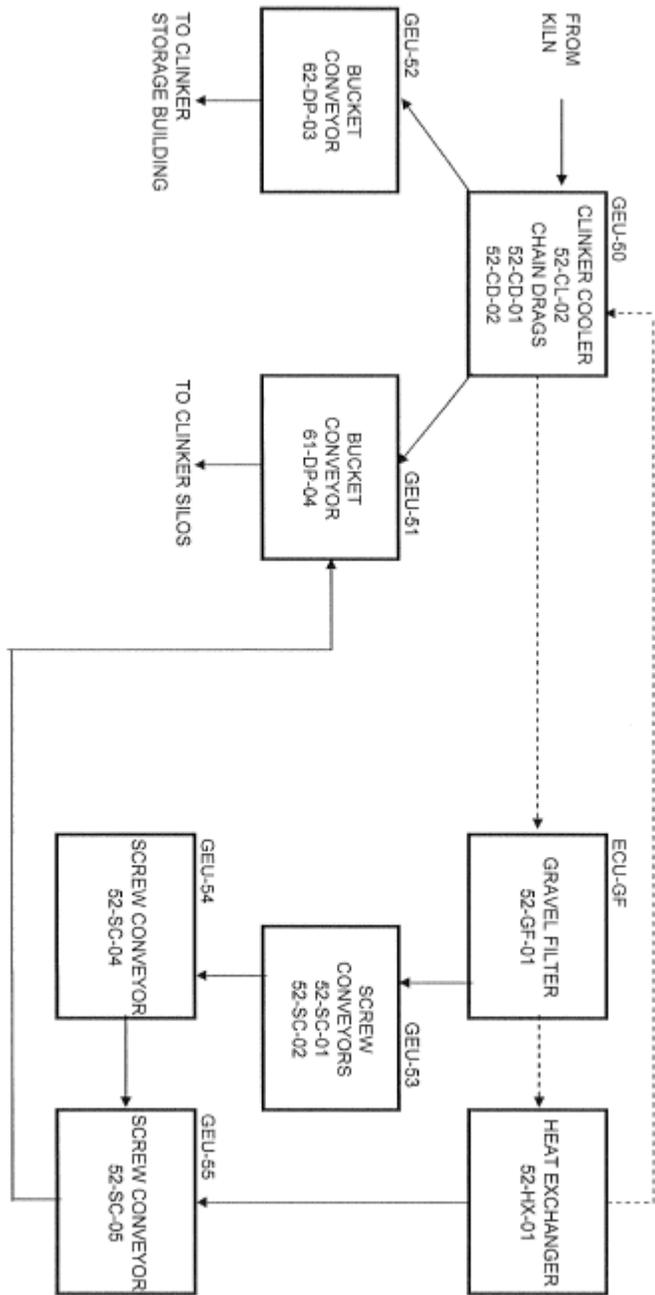


————— PROCESS SOLIDS FLOW
- - - - - PROCESS GAS FLOW

PROCESS DIAGRAM No. 6
 NATIONAL CEMENT COMPANY
 AREA 51 - PREHEATER/PRECALCINER AND KILN
 KILN DUST RETURN

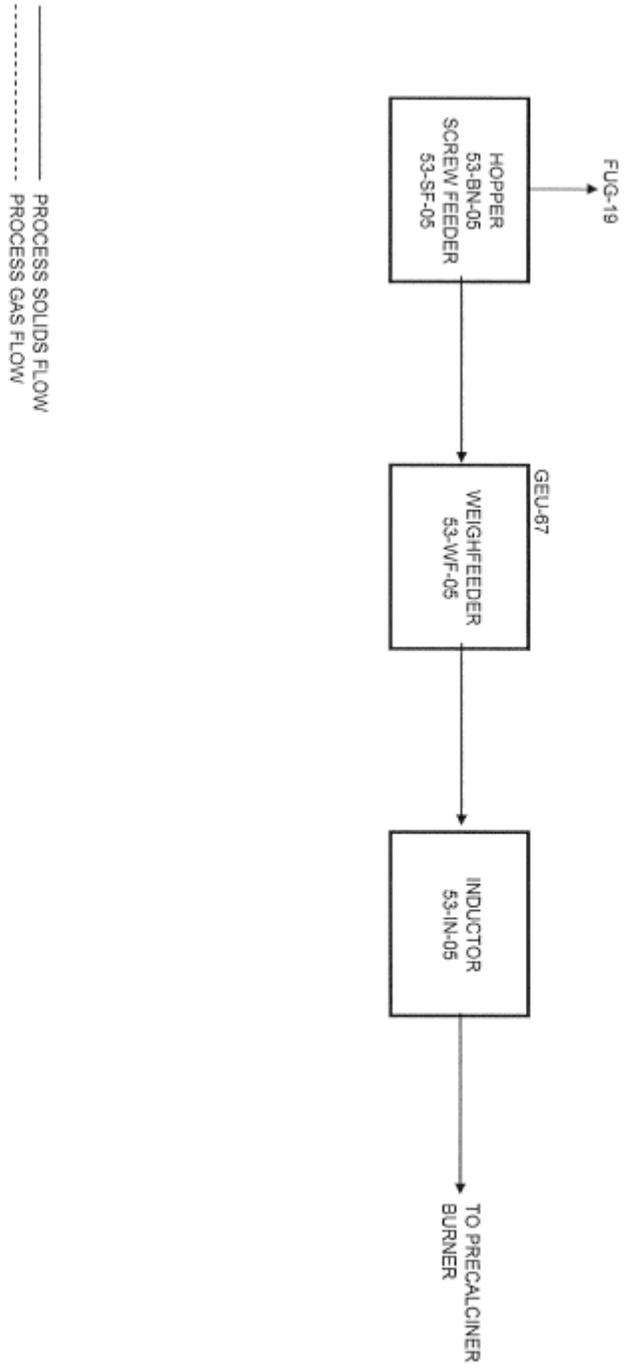


PROCESS DIAGRAM No. 7
 NATIONAL CEMENT COMPANY
 AREA 52 - CLINKER COOLING

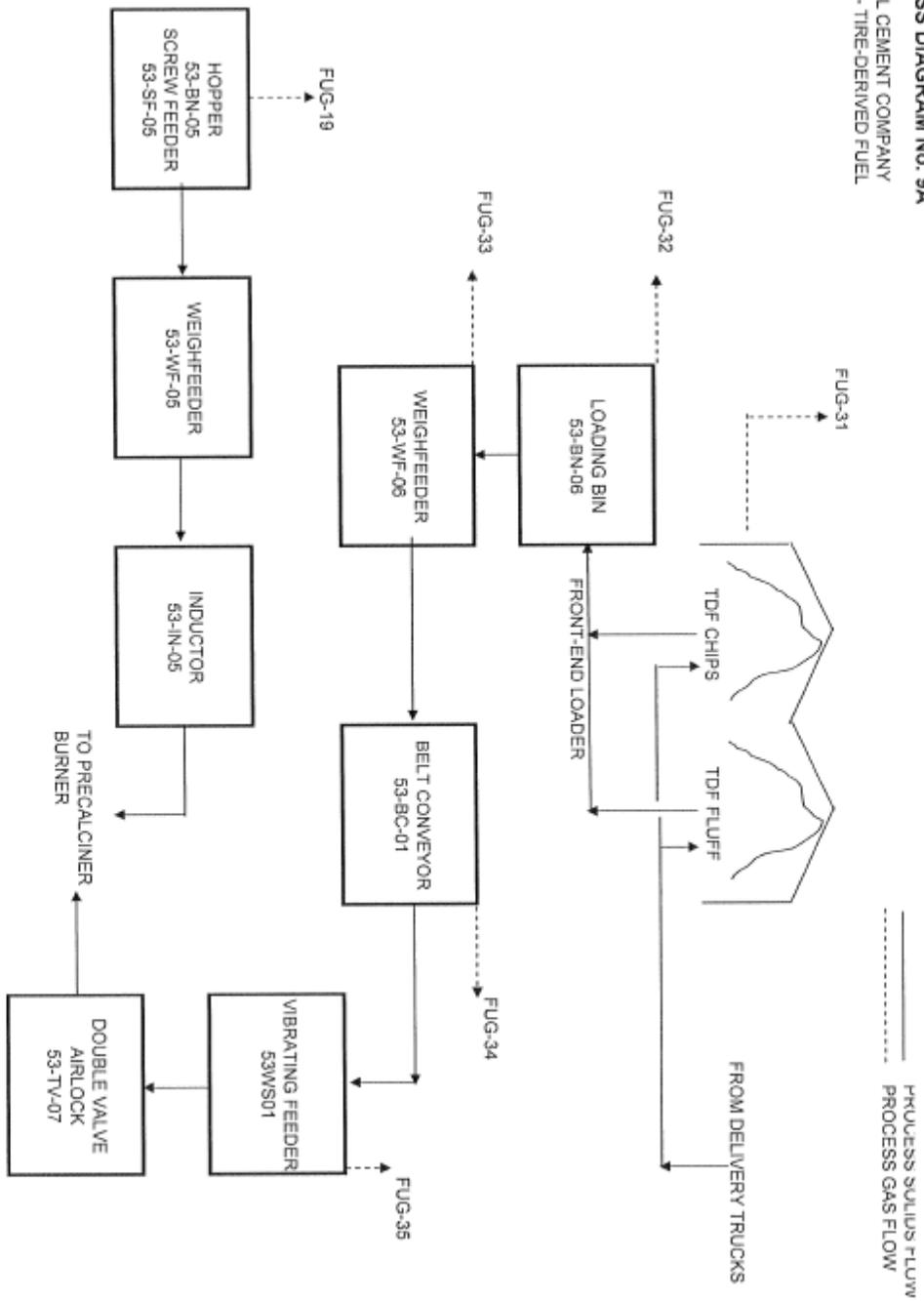


————— PROCESS SOLIDS FLOW
 - - - - - PROCESS GAS FLOW

PROCESS DIAGRAM No. 9
NATIONAL CEMENT COMPANY
AREA 53 - TIRE-DERIVED FUEL

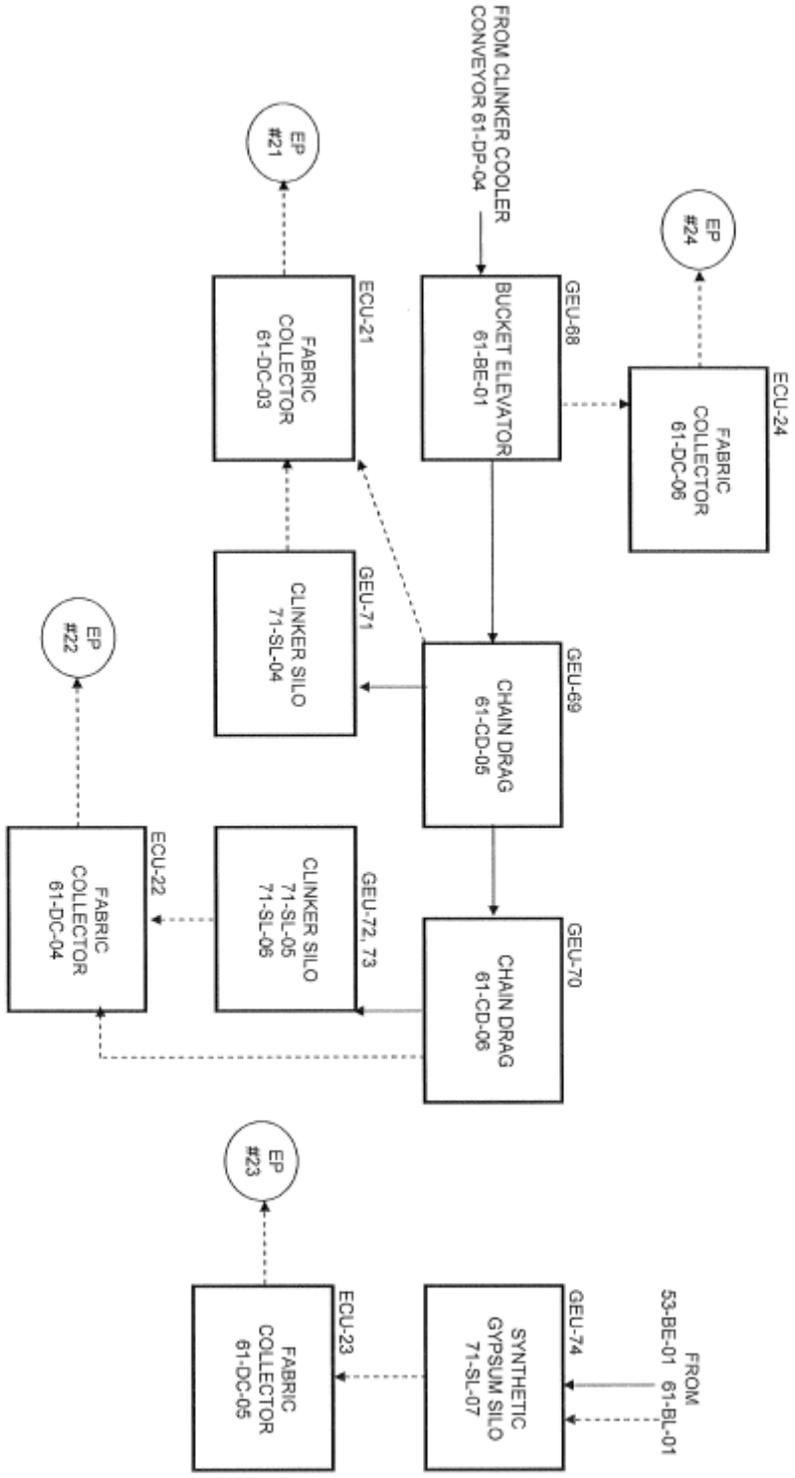


PROCESS DIAGRAM No. 9A
 NATIONAL CEMENT COMPANY
 AREA 53 - TIRE-DERIVED FUEL



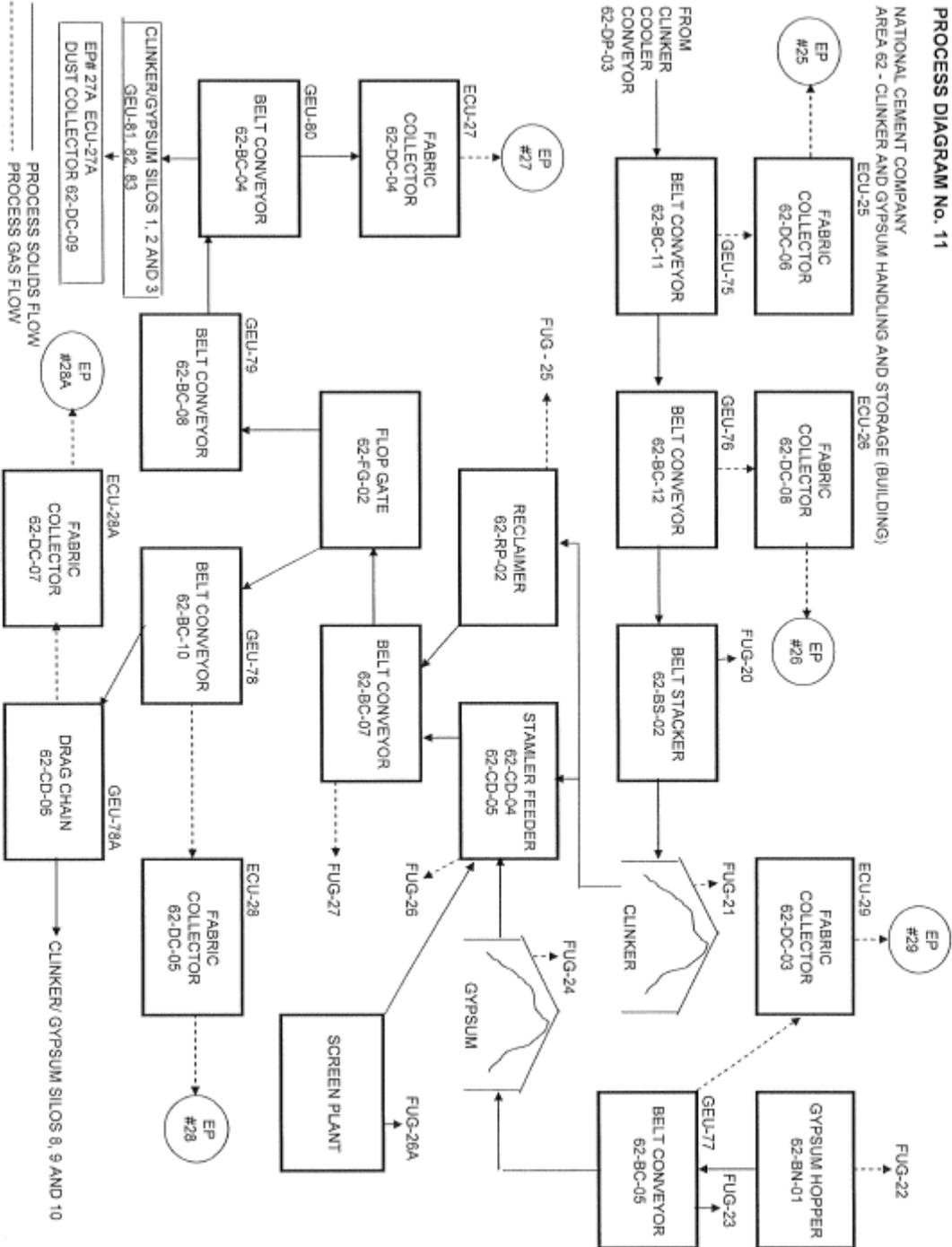
PROCESS DIAGRAM No. 10

NATIONAL CEMENT COMPANY
 AREA 61 - CLINKER AND GYPSUM HANDLING AND STORAGE (SILOS)



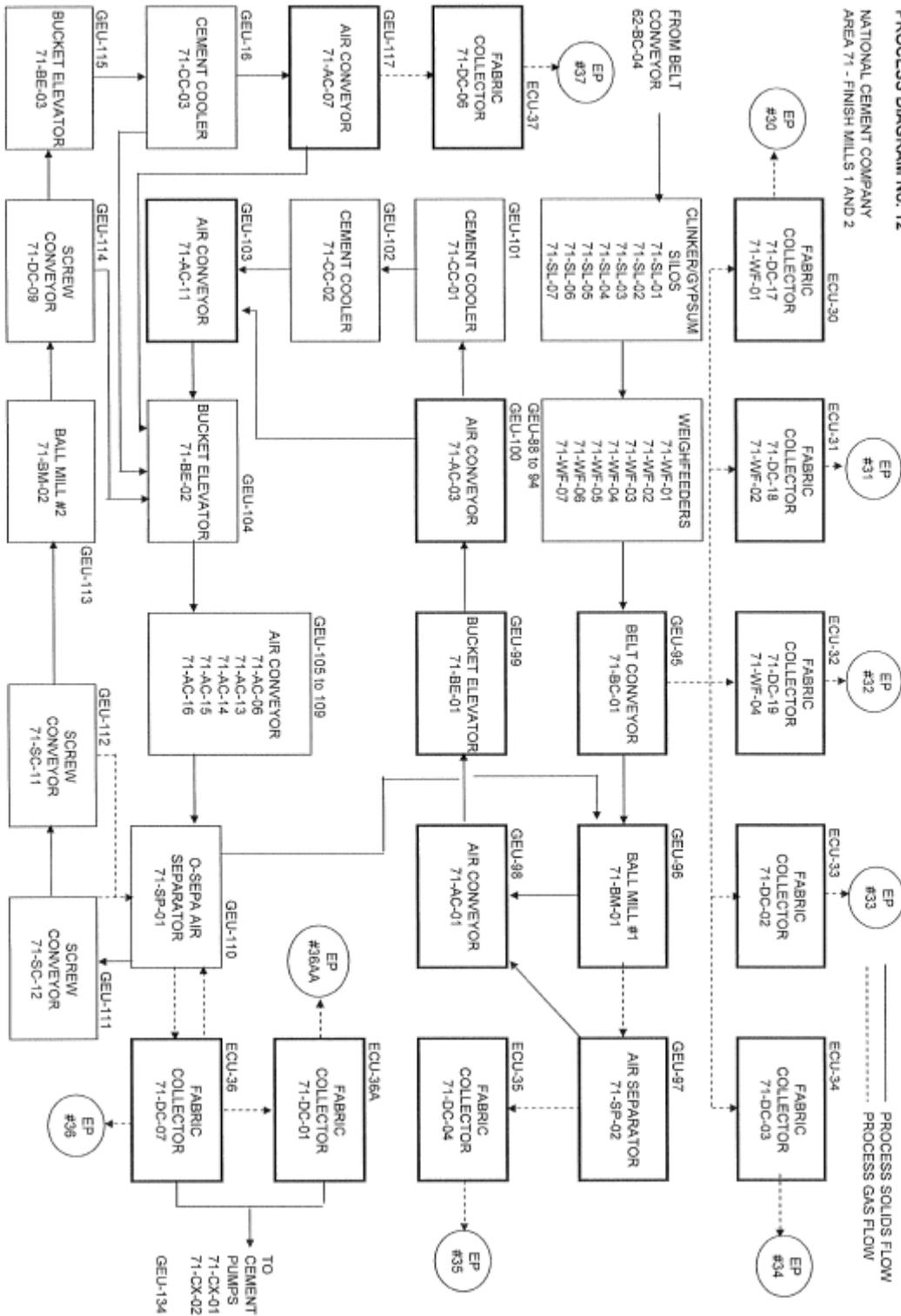
PROCESS DIAGRAM No. 11

NATIONAL CEMENT COMPANY
 AREA 62 - CLINKER AND GYPSUM HANDLING AND STORAGE (BUILDING)

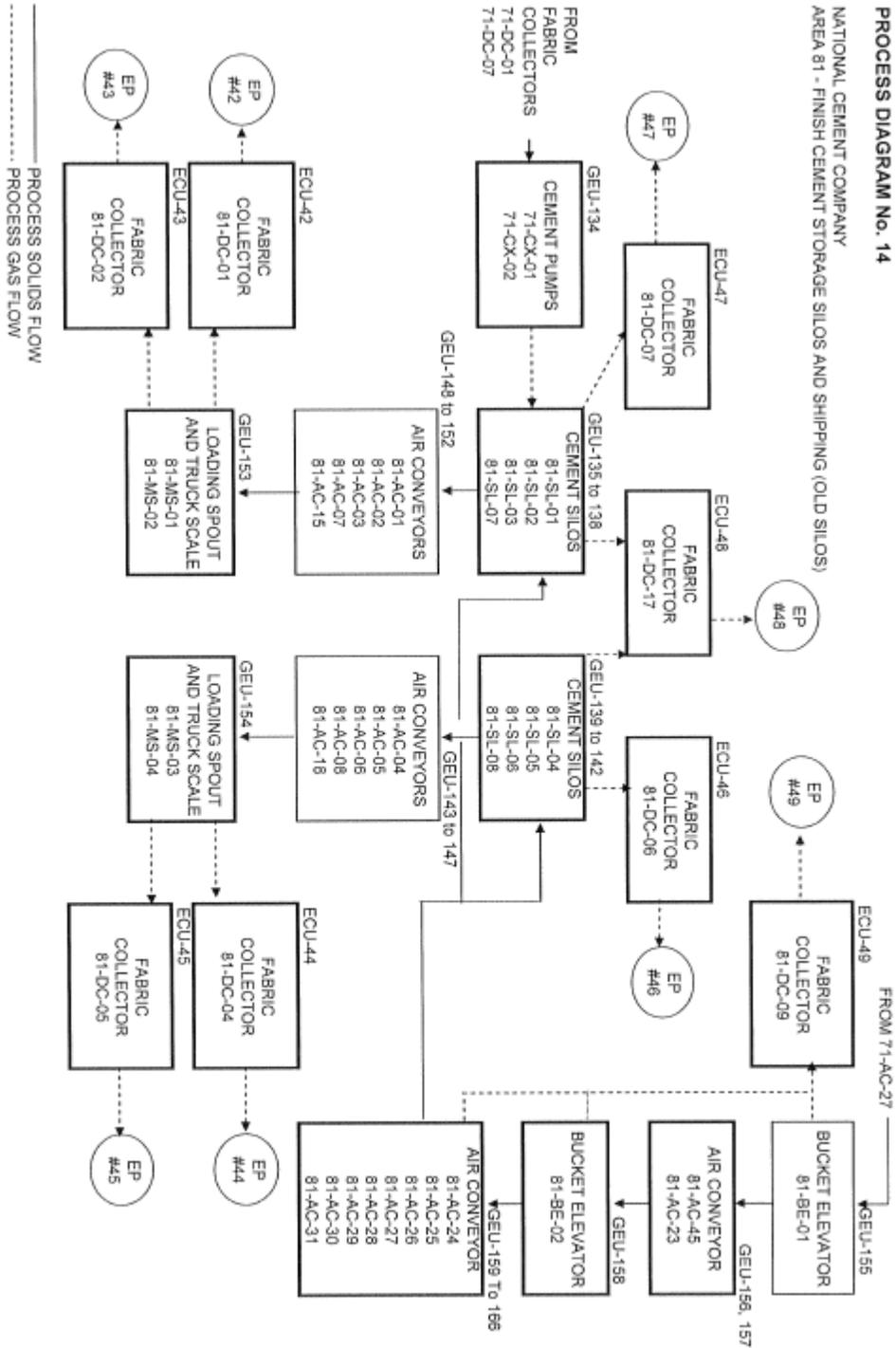


PROCESS DIAGRAM No. 12

NATIONAL CEMENT COMPANY
AREA 71 - FINISH MILLS 1 AND 2

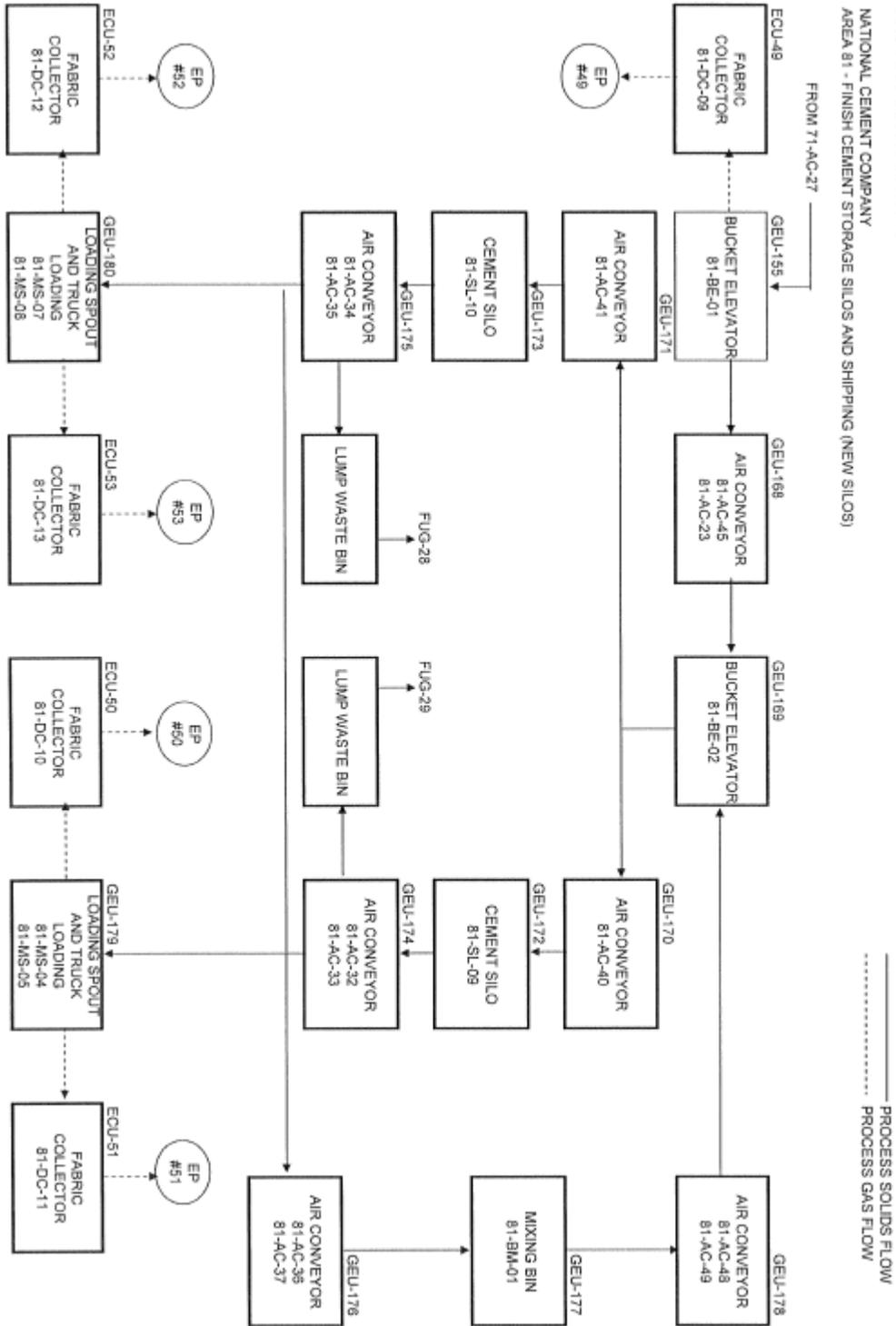


PROCESS DIAGRAM No. 14
 NATIONAL CEMENT COMPANY
 AREA 81 - FINISH CEMENT STORAGE SILOS AND SHIPPING (OLD SILOS)

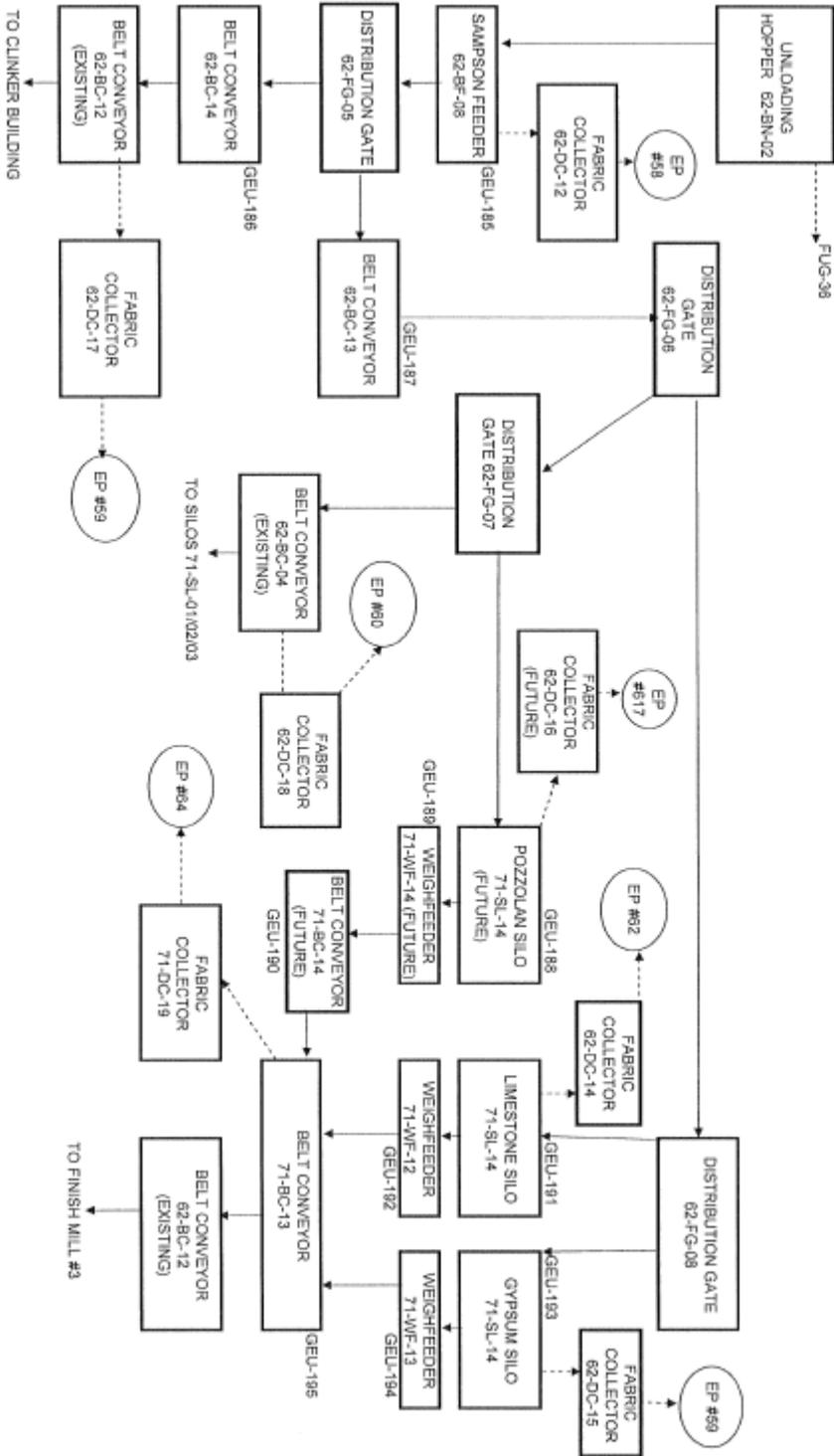


PROCESS DIAGRAM No. 15

NATIONAL CEMENT COMPANY
 AREA 81 - FINISH CEMENT STORAGE SILOS AND SHIPPING (NEW SILOS)



PROCESS DIAGRAM No. 16
 NATIONAL CEMENT COMPANY
 AREA 62 - FINISH MILL ADDITIVES SYSTEM



PROCESS DIAGRAM No. 17
NATIONAL CEMENT COMPANY



————— PROCESS SOLIDS FLOW
----- PROCESS GAS FLOW

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) and flop gate (31-FG-01) with discharge to stacking conveyor 31-BS-01 or belt conveyor 31-BC-03;
- F. Stacking conveyor (31-BS-01);
- G. Belt conveyor (31-BC-03) and flop gate (31-FG-02) with discharge to belt conveyor 32-BC-06 or 31-BC-04;
- H. Belt conveyor (31-BC-04) with discharge to belt conveyor (34-BC-09) and ventilated to dust collector 34-DC-07;
- I. 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;
- J. Screw conveyor 31-SC-03 serving dust collector 31-DC-03 with discharge to belt conveyor 31-BC-03;
- K. 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;
- L. Shale storage building (95 SHAL);
- M. Outside silica sand storage pile with wind barrier;
- N. Outside iron ore storage pile with wind barrier; and
- O. Outside clay (alumina bearing materials) storage pile with wind barrier.

OPERATIONAL CONDITIONS:

- 1. Wind barriers shall be located to protect storage pile from prevailing wind. (Rule 210.1)
- 2. Height of storage piles shall not exceed height of wind barrier. (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. Fabric collectors shall have operational differential pressure indicators. (Rule 209)
- 8. Sprays shall be maintained on primary crusher hopper and ore stacker to control dust emissions. (Rule 209)

Emission Unit 001 Permit Conditions

9. 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, L, M, N, and O) shall be less than 5% opacity; items L, M, N and O shall be less than 10% opacity (Rule 210.1 BACT); and items A, B, C, D, F, and J shall be less than 20% opacity. (Rule 401)
10. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)
11. Equipment shall be maintained according to manufacturer’s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
12. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
13. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD 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-03): | 0.011 | gr/scf |
| | 0.74 | lb/hr |
| | 17.65 | lb/day |
| | 3.22 | ton/yr |
| Fabric Collector (31-DC-04): | 0.011 | gr/scf |
| | 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 following:

| SOURCE | Size (acres) | Maximum Throughput (Tons/Year) | PM₁₀ Emissions (Tons/Year) |
|----------------------------------|---------------------|---------------------------------------|--|
| Shale | 0.23 | 1 | 2 |
| Silica sand | 0.1 | 1 | 2 |
| Iron Ore | 0.1 | 1 | 2 |
| Alumina bearing materials (clay) | 0.305 | 1 | 2 |

¹-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 EKAPCD Fugitive Dust Policy #95-02)

²-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 EKAPCD 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. 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 crusher and conveyors are in operation. (Rule 210.1)
- 4. Material collected in dust collectors shall be disposed in manner preventing entrainment in atmosphere. (Rule 209)
- 5. Dust collectors shall have operational differential pressure indicators. (Rule 209)
- 6. Water and dust suppressant sprays shall be maintained to control dust emissions. (Rule 401)
- 7. 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)
- 8. All material conveyors shall be covered/enclosed and shall have no visible emissions. (Rules 209 and 210.1 BACT)

Emission Unit 002 Permit Conditions

- 9. 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)
- 10. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
- 11. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
- 12. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

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 EKAPCD 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 PM₁₀):

| | | |
|------------------------------|-------|--------|
| 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.)

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 following:

Emission Unit 002 Permit Conditions

| SOURCE | Size (acres) | Maximum Throughput (Tons/Year) | PM₁₀ Emissions (Tons/Year) |
|---|-------------------------|---|--|
| 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 | 0.059 |
| Silica sand | 0.1 | ¹ | 0.592 |
| Alumina bearing materials (clay) | 0.305 | ¹ | 0.652 |
| TOTAL: | | | 8.601 |

¹-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 EKAPCD 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 EKAPCD 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.

OPERATIONAL CONDITIONS:

1. Fabric collector 41-DC-08 shall be equipped with operational differential pressure indicator. (Rule 210.1)
2. Fabric collector 41-DC-08 shall be equipped with pulse-jet cleaning mechanism. (Rule 210.1)
3. Particulate matter emissions from fabric collector 41-DC-08 exhaust shall not exceed 0.01-gr/scf. (Rule 210.1 BACT Requirement)
4. Particulate matter emissions from any single source operation shall be no more than 0.1-gr/scf. (Rule 404.1)
5. Visible emissions from fabric collector 41-DC-08 serving spent catalyst storage silo shall not exceed 5% opacity or ¼ Ringelmann. (Rule 210.1 BACT Requirement)
6. Maximum inlet dust collector (34-DC-06) temperature shall not exceed maximum continuous filter temperature. (Rule 210.1)
7. Visible emissions from any single emission point shall be less than 10% opacity. (Rule 422, Subpart F)
8. 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)
9. Each dust collector compartment shall be equipped with operational differential pressure indicator. (Rule 210.1)
10. All conveyor transfer points and airslides shall be completely enclosed. (Rule 210.1)
11. Fabric dust collectors shall be in operation when associated equipment is operated. (Rule 210.1)
12. All piping, ducting, and connections shall be leak-tight and have no visible emissions. (Rule 210.1)

Emission Unit 003 Permit Conditions

13. All conveyors transporting dry material shall be covered, leak-tight, have no visible emissions. (Rule 210.1)
14. Material collected in fabric dust collectors shall be disposed of in manner preventing entrainment in atmosphere. (Rule 210.1)
15. Equipment shall be maintained according to manufacturer's specifications. (Rules 209 and 210.1)
16. 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)
17. Emission from use of this equipment shall not cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)
18. 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)
19. Stack 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with any emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to EKACPD 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 (PM₁₀):

| | | |
|---|-------|--------|
| Fabric Collector (34-DC-05) (@ 2,000-acfm) | 0.01 | gr/acf |
| | 0.17 | lb/hr |
| | 4.11 | lb/day |
| | 0.75 | ton/yr |
| Fabric Collector(34-DC-06) (@ 3,450-acfm) | 0.01 | gr/acf |
| | 0.29 | lb/hr |
| | 7.01 | lb/day |
| | 1.28 | ton/yr |
| Fabric Collector (34-DC-07) (@ 4,600-acfm) | 0.011 | gr/acf |
| | 0.43 | lb/hr |
| | 10.41 | lb/day |
| | 1.90 | ton/yr |

Emission Unit 003 Permit Conditions

Particulate Matter (PM₁₀):

| | |
|--|---|
| Fabric Collector (41-DC-04) (@ 1,500-acfm) | 0.01 gr/acf 0.13 lb/hr 1.54 lb/day 0.28 ton/yr |
| Fabric Collector (41-DC-09) (@ 3,150-acfm) | 0.011 gr/acf 0.30 lb/hr 7.13 lb/day 1.30 ton/yr |
| Fabric Collector (41-DC-10) (@ 11,730-acfm) | 0.011 gr/acf 1.11 lb/hr 26.53 lb/day 4.84 ton/yr |
| Fabric Collector (41-DC-11) (@ 2,000-acfm) | 0.011 gr/acf 0.19 lb/hr 4.53 lb/day 0.83 ton/yr |
| Fabric Collector (42-DC-07) (@ 4,350-acfm) | 0.011 gr/acf 0.41 lb/hr 9.84 lb/day 1.80 ton/yr |
| Spent catalyst fines Storage Silo (41-DC-08) Fabric Collector (@ 1,500-scfm) | 0.01 gr/scf (Rule 210.1 BACT Requirement) 0.13 lb/hr 0.26 lb/day 0.05 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 three years. (Rules 209 and 210.1)

SPECIAL CONDITIONS:

- aa. This source is exempt from PSD review because of PM₁₀ 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 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. One 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; and
- P. Two coke mill 3.5mm Btu/hr booster heaters, Hauck 784 series, serving coke mill.

OPERATIONAL CONDITIONS:

1. Opacity of stack emission shall not equal or exceed 5% or Ringelmann No. 3. (Rule 210.1 BACT Requirement)
2. Roll crusher shall have no visible emissions. (Rule 210.1)
3. All conveyor transfer points and air slides shall be completely enclosed and ducted to operational dust collector. (Rule 210.1)
4. Equipment shall be maintained according to manufacturer=s specifications to ensure compliance with emissions limitations. (Rules 209 and 210.1)
5. Fines collected in dust collectors shall be returned to process. (Rules 209 and 210.1)
6. Compliance with 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)
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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

| | |
|--|--|
| Calciner Coke Feed Dust Collector (53-DC-13) | 0.01 gr/dscf (Rule 210.1 BACT Requirement) |
| | 1.37 lb/hr |
| | 32.88 lb/day |
| | 6.00 ton/yr |
| Kiln Coke Feed Dust Collector (53-DC-14) | 0.01 gr/dscf (Rule 210.1 BACT Requirement) |
| | 0.65 lb/hr |
| | 15.67 lb/day |
| | 2.86 ton/yr |
| From Dust Collector (53-DC-06) | 0.20 gr/dscf (Rule 404.1) |
| | 5.22 lb/hr (Rule 404.1) |
| | 125.2 lb/day (Rule 404.1) |
| | 22.86 ton/yr (Rule 404.1) |
| Pulverized Coke Bin #2 Dust Collector (53-DC-16) | 0.01 gr/dscf (Rule 210.1 BACT Requirement) |
| | 0.12 lb/hr |
| | 2.94 lb/day |
| | 0.54 ton/yr |
| Pulverized Coke Bin #1 Dust Collector (53-DC-17) | 0.01 gr/dscf (Rule 210.1 BACT Requirement) |
| | 0.12 lb/hr |
| | 2.94 lb/day |
| | 0.54 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. 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)

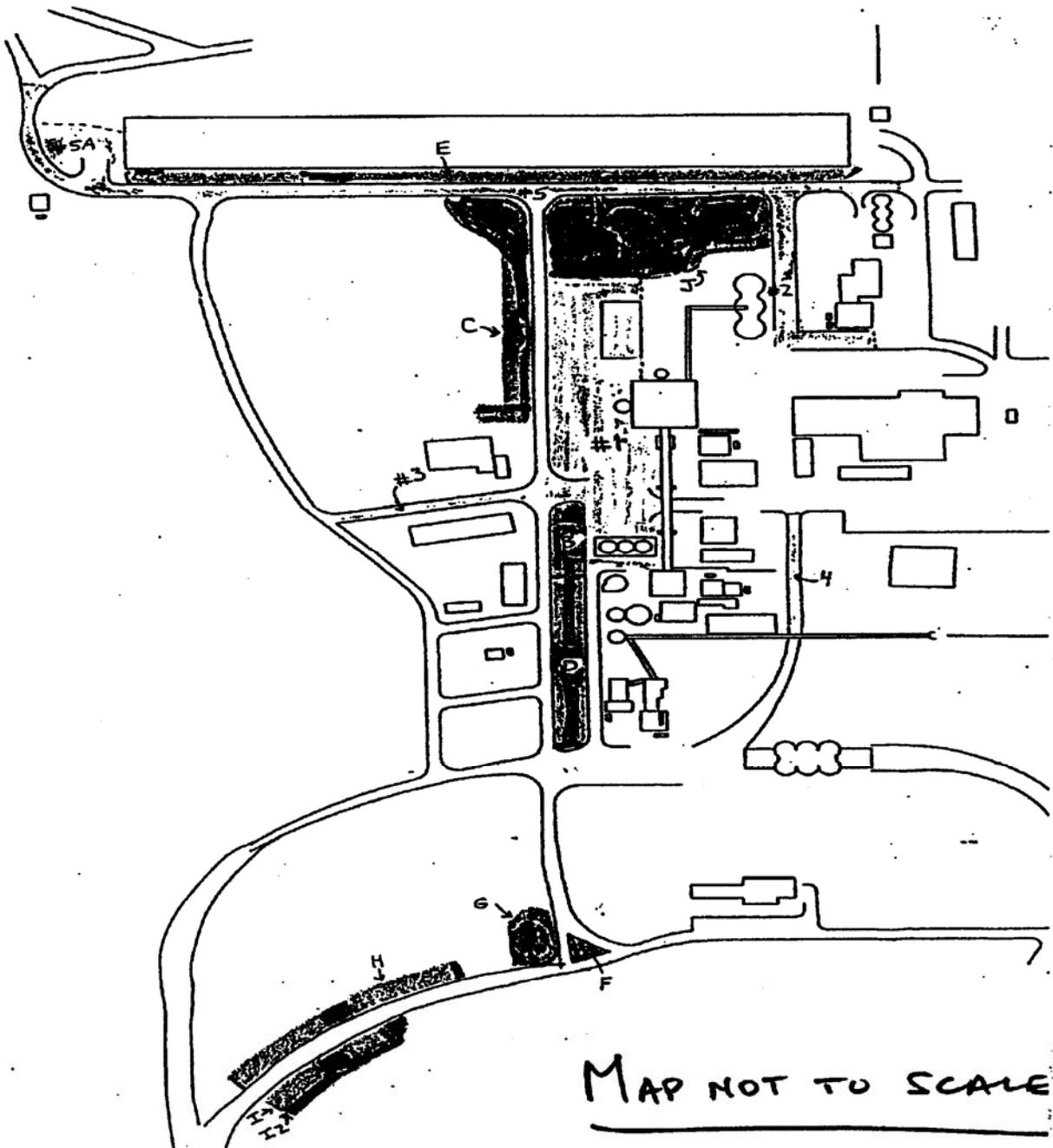
PAVED AREAS

| <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 | 1,037 X 41 | 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 + I2 | Plant entrance southwest patch | Grass | 320 X 81 | 1.199 |
| J | Old baghouse area | Ground cover | 225 X 270 | 1.314 |



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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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

Emission Unit 006 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀):

| | | |
|---|--------|--------|
| 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 (PM₁₀):

| | | |
|--|-------|--------|
| 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 |

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

Emission Unit 006 Permit Conditions

- 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 PM₁₀ 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)

DRAFT

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 & Storage, including following equipment:

EQUIPMENT DESCRIPTION: Modification to Existing Finish Mill System by Installing Cement Additive Handling and Storage Operation, including following equipment and design specification:

- 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 185⁰ 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 185⁰ 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;

Emission Unit 007 Permit Conditions

- U. Three finish mill feed silos (71-SL-01 through 71-SL-03) ventilated to 62-DC-09;
- 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with 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 (PM₁₀):

| | | |
|--|-------|--------|
| 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 |

Emission Unit 007 Permit Conditions

Particulate Matter (PM₁₀):

| | | |
|---|--------|--------|
| Fabric Collector (71-DC-07) (@ 120,000 acfm) | 0.011 | gr/scf |
| | 11.70 | lb/hr |
| | 280.88 | lb/day |
| | 51.26 | ton/yr |
| Fabric Collector (71-DC-16) (@ 1,250 acfm) | 0.01 | gr/scf |
| | 0.47 | lb/hr |
| | 11.31 | lb/day |
| | 2.06 | ton/yr |
| Fabric Collector (71-DC-17) (@ 1,250 acfm) | 0.01 | gr/scf |
| | 0.47 | lb/hr |
| | 11.31 | lb/day |
| | 2.06 | ton/yr |
| Fabric Collector (71-DC-18) (@ 1,250 acfm) | 0.01 | gr/scf |
| | 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 ARB PERP equipment operation according to notification requirements listed on the permit. National Cement shall maintain records of all ARB PERP permits for five years and no ARB 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. Gypsum stacker with water sprays (62-BC-05);
- C. Covered gypsum storage area;
- D. Belt feeder (62-BF-01) to tunnel conveyor;
- E. Hydraulic boot system (62-BL-01);
- F. Fabric dust collector (62-DC-03) with 2,000 acfm fan; and
- G. Rotary feeder (62-RF-01).

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/ft³ 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 LIMITS:

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

Particulate Matter (PM₁₀):

- 0.10 gr/dscf (Rule 404.1)
- 1.71 lb/hr
- 13.71 lb/day

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

Emission Unit 009 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)

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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 unloaders (81-MS-01 through 81-MS-04) ventilated to fabric collectors 81-DC-01 through 81-DC-04;
- S. Four 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. 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD 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 (PM₁₀):

| | | |
|--|--------------------------------|-------------------------------------|
| Each Fabric Collector (81-DC-10, 81-DC-11, 81-DC-12 and 81-DC-13) | 0.011 0.29 7.01 1.28 | gr/scf lb/hr lb/day ton/yr |
| Fabric Collector (81-DC-06) | 0.011 0.47 11.31 2.06 | gr/scf lb/hr lb/day ton/yr |
| Fabric Collector (81-DC-07) | 0.011 1.89 45.26 8.26 | gr/scf lb/hr lb/day ton/yr |
| Fabric Collector (81-DC-09) | 0.011 1.13 27.15 4.96 | gr/scf lb/hr lb/day ton/yr |
| Fabric Collector (81-DC-18) | 0.02 0.08 2.08 | gr/scf lb/hr lb/day |
| Fabric Collector (81-DC-19) | 0.02 0.08 2.08 | gr/scf lb/hr 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 (E90304);
- C. 16 yard front end loader for loading shot rock into 85 ton haul trucks (E9046);
- D. 85 and 100 ton capacity haul trucks (E90203 and E90204); and
- E. 16,000 gallon capacity water truck for haul road dust suppression (E90708).

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 209)
- 3. Equipment shall be maintained as per manufacturer's recommendations. (Rule 209)
- 4. Material collected in fabric collector shall be disposed in manner preventing entrainment in atmosphere. (Rule 209)

Emission Unit 018 Permit Conditions

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

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. One existing 3,000 gallon unleaded grade aboveground gasoline storage tank serving one nozzle at one island;
- B. Phase I (filling of storage tank) vapor collection system, including separate vapor riser with:
 - 1. Liquid fill adaptor;
 - 2. Liquid fill cap;
 - 3. Vapor adaptor;
 - 4. Drop tube;
 - 5. Pressure/vacuum relief valve; and
 - 6. Overfill protection.
- C. Permanently affixed fill tube terminating no more than six inches from bottom of tank;
- D. Balance type Phase II (refueling of motor vehicles) gasoline vapor control system, including:
 - 1. Product dispensing/vapor collection nozzles;
 - 2. Vapor hoses (nozzles to risers) coaxial hose assembly;
 - 3. Nozzle/vapor hose swivels:
 - a. Nozzle swivels: None required;
 - b. Island swivels: None required;
 - c. Dispenser swivels: None required; and
 - d. Retractor swivel: None required.
 - 4. Flow limiters: None;
 - 5. Recirculation traps/anti-recirculation valves: Not required;
 - 6. Vapor check valve;
 - 7. Overhead hose retractors;
 - 8. Dispenser suction pump; and
 - 9. General exterior of tank shall be painted white (Executive Order G-70-130).

OPERATIONAL CONDITIONS:

- 1. System shall be of California Air Resources Board Acertified@ design. (Rule 412)
- 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. (Rule 209, 412, and 412.1)
- 3. Vapor control system shall be of California Air Resources Board (CARB) certified design. Manufacturer's recommendations for installation, operation, and maintenance shall be followed to prevent at least 95% by weight of all gasoline vapors from entering atmosphere. (Rules 209, 412, and 412.1)

Emission Unit 018 Permit Conditions

4. All Phase I (filling of storage tank) vapor collection equipment shall be used when tank is filled. (Rules 209 and 412)
5. Gasoline flow through any nozzle shall not exceed ten gallons per minute. (Rule 412.1)
6. Retail stations shall post following: Illustrated instructions for dispensing fuel to vehicle; warning that topping off is prohibited; and toll-free number for registering complaints regarding operation of vapor recovery system. (Rule 209)
7. All lines, fittings, adapters, caps, and connections shall be maintained leak-free. (Rule 412.1)
8. Tank shall be equipped with permanently submerged fill pipe terminating no more than six inches from bottom of tank. (Rule 412)
9. 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)
10. General exterior of tank shall be white in color. (Rule 412.1)
11. Tank shall be equipped with pressure-vacuum valve set to within 10% of maximum allowable working pressure of tank. (Rule 412)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD 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:

Volatile Organic Compounds (VOC):

| | |
|------|--------|
| 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 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 018 Permit Conditions

SPECIAL CONDITIONS:

- aa. Gasoline throughput shall not exceed 36,000 gallons per year without prior District approval. (Rule 210.1)
- bb. Equipment shall be installed and operated as described in California Air Resources Board Executive Order G-70-102-A and G-70-130-A. (Rule 209)
- cc. System and components shall be of California Air Resources Board Acertified@ design, any component changes shall be approved in advance by EKAPCD. (Rule 412)

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Emission Unit 019 Permit Conditions

| <u>Facility Number</u> | <u>Emissions Unit</u> | <u>Description of Source</u> |
|------------------------|-----------------------|--|
| 1128 | 019 | <u>Piston Engine with Air Compressor #E90004</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Air Compressor #E90004, including following equipment:

One 195 bhp diesel piston engine powering portable air compressor.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Visible emissions from engine exhaust shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
4. Engine operation shall be no more than 1,000 hours per year. (Rule 210.1)
5. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 209)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
8. If engine is operated at same location within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)
9. 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 EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

EMISSION LIMITS:

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

Emission Unit 019 Permit Conditions

| | |
|---|---------------|
| <u>Particulate Matter (PM₁₀):</u> | 0.43 lb/hr |
| | 10.32 lb/day |
| | 0.22 ton/yr |
| <u>Sulfur Oxides (as SO₂):</u> | 0.07 lb/hr |
| | 1.70 lb/day |
| | 0.04 ton/yr |
| <u>Oxides of Nitrogen (as NO₂):</u> | 6.13 lb/hr |
| | 147.16 lb/day |
| | 3.07 ton/yr |
| <u>Volatile Organic Compounds (VOC):</u> (as defined in Rule 210.1) | 0.10 lb/hr |
| | 2.34 lb/day |
| | 0.05 ton/yr |
| <u>Carbon Monoxide:</u> | 4.58 lb/hr |
| | 109.90 lb/day |

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

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

Emission Unit 020 Permit Conditions

| <u>Facility Number</u> | <u>Emissions Unit</u> | <u>Description of Source</u> |
|------------------------|-----------------------|--|
| 1128 | 020 | <u>Piston Engine with Air Compressor #E90006</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Piston Engine with Air Compressor #E90006, including following equipment:

One 195 bhp diesel piston engine powering portable air compressor.

OPERATIONAL CONDITIONS:

1. Engine shall have operational elapsed time meter (or approved equivalent method) indicating cumulative hours of engine operating time. (Rules 209 and 210.1)
2. Visible emissions from engine exhaust shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
3. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
4. Engine operation shall be no more than 1,000 hours per year. (Rule 210.1)
5. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 209)
6. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel. (Rule 209)
7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rules 210.1 and 209)
8. If engine is operated at same location within facility for more than one year, such unit shall comply with Rule 427. (Rule 427)
9. 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 EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

Emission Unit 019 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (PM₁₀): 0.43 lb/hr
 10.32 lb/day
 0.22 ton/yr

Sulfur Oxides (as SO₂): 0.07 lb/hr
 1.70 lb/day
 0.04 ton/yr

Oxides of Nitrogen (as NO₂): 6.13 lb/hr
 147.16 lb/day
 3.07 ton/yr

Volatile Organic Compounds (VOC): 0.10 lb/hr
(as defined in Rule 210.1) 2.34 lb/day
 0.05 ton/yr

Carbon Monoxide: 4.58 lb/hr
 109.90 lb/day

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

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

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 #E90777</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator #E90777, including following equipment:

One 400 bhp emergency use diesel piston engine powering electrical generator.

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1 gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 210.1 Offset Exemption)

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 #51ED01</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Emergency Use Piston Engine with Generator #51ED01, including following equipment:

One 165 bhp emergency use propane piston engine powering generator

OPERATIONAL CONDITIONS:

1. Visible emissions shall be less than 20% opacity or Ringelmann No. 1 except for not more than three minutes in any one hour. (Rule 401)
2. Exhaust gas particulate matter concentration shall be no more than 0.1-gr/scf. (Rule 404.1)
3. Sulfur compounds emissions shall be no more than 0.2% (2,000 ppmv) calculated as sulfur dioxide (SO₂). (Rule 407)
4. Engine operation shall be no more than 200 hours per year. (Rule 210.1 Offset Exemption)

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 chassis;
- B. One 125 hp electric motor to drive blower and one small gasoline engine to operate hydraulic system; and
- C. Vacuum system with 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 (SO₂). (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/ft³ 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 (of PM₁₀):

- 0.10 gr/dscf (Rule 404.1)
- 1.37 lb/hr
- 10.97 lb/day
- 2.00 ton/yr

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 & 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 (ATC 1128006O);
- 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Emission Unit 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. Ford 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 EKAPCD 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 gr/dscf
21.39 lb/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-13;
- 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-13);
- 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-13; and
- FF. The unloading hopper (PTO #1128006) over belt conveyor 62-BC-10 will be removed.

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

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Emission Unit 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 (PM₁₀):

| | | |
|-----------------------------|--------|--------|
| 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 |
| | 9.05 | lb/day |
| | 1.65 | ton/yr |
| Fabric Collector (71-DC-08) | 0.011 | gr/scf |
| | 11.50 | lb/hr |
| | 276.07 | lb/day |
| | 50.38 | 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 |

(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) National Cement shall provide District with a written notification of any ARB PERP equipment operation according to notification requirements listed on the permit. National Cement shall maintain records of all ARB PERP permits for five years and no ARB PERP equipment shall be operated in a manner consistent with a stationary application, i.e. routine and predictable, without prior District approval.
- bb) The owner or operator shall perform CARB Method 5 on fabric collector 71-DC-19 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)

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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/ft³ 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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD Guidelines for Compliance Testing, 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 (PM₁₀): 0.17 lb/hr
 4.15 lb/day
 0.02 ton/yr

Sulfur Oxides (as SO₂): 0.21 lb/hr
 4.98 lb/day
 0.02 ton/yr

Oxides of Nitrogen (as NO₂): 5.84 lb/hr
 140.21 lb/day
 0.58 ton/yr

Volatile Organic Compounds (VOC): 0.21 lb/hr
 4.98 lb/day
 0.02 ton/yr

Carbon Monoxide: 0.77 lb/hr
 18.56 lb/day
 0.08 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 Authority to Construct unless advance approval is granted for alternative.
- bb. This source is exempt from PSD review because of PM₁₀ 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. Indoor clinker screening and associated processes shall occur only within clinker storage building. (Rule 210.1 BACT Requirement)
- 2. Indoor clinker screening throughput shall not exceed 35,000 tons per year without prior District approval (Rule 210.1)
- 3. Outdoor screening shall be limited to only petroleum coke storage pile. No other outdoor material shall be screened without prior District approval. (Rule 210.1)
- 4. Outdoor petroleum coke storage pile shall contain at least 8% moisture content. (Rule 210.1)
- 5. Dust suppressant or water shall be applied to petroleum coke if visible emissions exceed 10%. (Rule 210.1)
- 6. Drop heights shall be kept at a minimum to limit visible emissions. (Rule 210.1)
- 7. Visible emissions from clinker storage, conveyor transfer points and bulk loading and unloading systems shall be limited to 10% opacity. (Rule 422)
- 8. 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)
- 9. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emission limitations. (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)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with hourly and concentration emission limits shall be verified pursuant to Rule 108.1 and EKAPCD 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 PM₁₀):

0.16 lbm/hr

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 Receiving, Storage and Handling Equipment</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

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

- A. Two storage bins equipped with "live" bottoms (54-BN-05 and -06);
- B. Two weighfeeders (one for each bin in item A) to measure the TDF addition to the precalciner burner (54-WF-05 and -06);
- C. Three enclosed outdoor storage containment structures to house TDF;
- D. Belt conveyor transferring TDF from the weighfeeders in Item B to a metering feeder;
- E. Transfer feeder (54-VF-01) transferring the TDF from the conveyor belt in item D to an airlock;
- F. Airlock to prevent loss of heat from the precalciner and provide a safety feature against blowback (54-TV-07);
- G. One fabric filter dust collector rated at 10 hp and 3700 dscfm equipped with a total of 1092 square feet of filter area and configured for an air to cloth ratio of 3.49:1;
- H. One fabric filter dust collector rated at 10 hp and 2400 dscfm equipped with a total of 691square feet of filter area and configured for an air to cloth ratio of 3.47:1;
- I. Calciner burner chamber (51-BU-02);
- J. TDF hopper, conveyor screw, blower, eductor and piping (PTO No. 1128040);
- K. One 1500 gallon surfactant storage tank;
- L. Control panel for optimizing the addition of surfactant;
- M. 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; and
- N. Associated piping for water, surfactant and compressed air.

OPERATIONAL CONDITIONS:

- 1. Average tire chip size shall not be smaller than one inch. (Rules 209 and 405)
- 2. Outdoor storage area shall not exceed 5,000 square feet of continuous area and 50,000 cubic feet in volume. (California Fire Code)
- 3. 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)
- 4. TDF transfer to kiln system shall be limited to percentage specified in current version of ATC/PTO 1128004. (Rule 210.1)

Emission Unit 039 Permit Conditions

5. Tire chip storage shall be limited to covered trailers or storage bins during normal operations. (Rules 209, 210.1 BACT and 401)
6. Tire chips shall be stored on concrete. (Rules 209, 210.1 BACT and 401)
7. No tire chips or tire fluff shall be stored on dirt, except in emergency situations. (Rules 209, 210.1 BACT and 401)
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. No fluff shall be open-stored. (Rules 209, 210.1, 402 and 419)
10. Applicant shall transfer tire chips from covered trailers directly to storage bins during normal operations. (Rule 210.1 and 401)
11. There shall be no visible emissions from operation, except for receiving hopper, 54-BN-05. (Rule 210.1 BACT)
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. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Emission Unit 040 Permit Conditions

| <u>Facility Number</u> | <u>Emissions Unit</u> | <u>Description of Source</u> |
|------------------------|-----------------------|---|
| 1128 | 040 | <u>Solid Fuel Receiving/Handling System</u> |

Emission Unit Equipment Description/Permit Conditions

Federally Enforceable Conditions

EQUIPMENT DESCRIPTION: Solid Fuel Receiving/Handling System, including following equipment:

- A. Three outdoor enclosed storage containment structures to house TDF (shared with ATC No. 1128039);
- B. Receiving hopper (54-BN-05);
- C. Screw conveyor to transfer TDF from the hopper to the weigh feeder (54-SF-05);
- D. Weigh feeder to measure the amount of TDF introduced to the system (54-WF-05);
- E. Blower and associated ducting to convey the TDF to the precalciner (54-BL-05); and
- F. Piping to convey TDF to the main burner at the rotary kiln.

OPERATIONAL CONDITIONS:

- 1. Average fuel chip size shall not be smaller than one inch. (Rules 209 and 405)
- 2. 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 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)
- 3. Receiving and conveying operation shall be used for solid fuel only. (Rules 209 and 210.1)
- 4. No tire chips or tire fluff shall be stored on dirt, except in emergency situations. (Rules 209, 210.1 BACT and 401)
- 5. 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)
- 6. 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)
- 7. There shall be no visible emissions from operation. (Rule 210.1 BACT)
- 8. 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)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

Emission Unit 041 Permit Conditions

| <u>Facility Number</u> | <u>Emissions Unit</u> | <u>Description of Source</u> |
|------------------------|-----------------------|------------------------------|
| 1128 | 041 | <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 a diesel-fueled engine (permit exempt); and
- B. Vacuum loader including 5300 cfm blower, integral cyclone, baghouse and vacuum recovery cleaning mechanism.

OPERATIONAL CONDITIONS:

- 1. Hours of operation shall not exceed 16 hours per day without prior District approval. (Rule 210.1)
- 2. Vacuum unit exhaust particulate matter (PM₁₀) concentration shall be no more than 0.011 gr/dscf. (Rule 210.1 BACT Requirement)
- 3. Dust collector shall be equipped with vacuum recovery cleaning mechanism. (Rule 209)
- 4. Visible emissions from vacuum unit exhaust shall be no more than 5% opacity or Ringelmann No. ¼. (Rule 210.1 BACT Requirement)
- 5. Baghouse shall be in operation when vacuum unit is operated. (Rule 210.1)
- 6. Material collected in dust collector shall be disposed of in manner preventing entrainment in atmosphere. (Rules 209 and 210.1)
- 7. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. Baghouse components and hoses shall be maintained on regular basis to prevent excessive emissions. (Rules 209 and 210.1)
- 8. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rules 209 and 210.1)
- 9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance or endanger, comfort, repose, health, or safety of any considerable number of persons or public. (Rule 419 and CH&SC, Sec 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

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 EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

Emission Unit 041 Permit Conditions

EMISSION LIMITS:

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

Particulate Matter (of PM₁₀):

- 0.011 gr/dscf (BACT)
- 0.50 lb/hr
- 8.00 ton/yr
- 1.46 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 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. Air conveyor (51-AC-02) served by 7,100 acfm pulse jet fabric collector (51-DC-09);
- O. Two diverter gates (42-DG-08 and 42-DG-09);
- P. 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);
- Q. Air conveyor (42-AC-25) with blower (42-BL-12 and 5 hp);
- R. 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);
- S. Weigh scale (42-WS-02);
- T. 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);
- U. Fuel oil storage tank (51-TK-01, permit exempt);
- V. 150 MMBtu/hour coke/TDF/natural gas-fueled, precalciner preceded by multi-stage preheater (51-PH-01);
- W. Rotary cement kiln system (51-KN-01) with one multi-channel Fuller Duoflex low NOx burner with provisions to introduce #2 fuel oil, natural gas, petroleum coke, or TDF with a nominal rating of 10 ton/hr of coke for production of approximately 3,400 ton/day clinker;
- X. Evaporative cooling tower (51-CT-01) with hopper and 24 inch screw conveyor; (existing)
- Y. Rotary valve (51-RV-29);
- Z. Tempering air damper (51-DA-34);

Emission Unit 042 Permit Conditions

- AA. Bucket elevator (51-BE-03) with 280 feet lift served by 8,200 acfm pulse jet fabric collector (51-DC-08);
- BB. 70-ton capacity cement kiln system feed recirculation bin (51-BN-02) receiving bypass material from bucket elevator (51-BE-03);
- CC. Cement kiln system fabric collector (51-BH-02), including pulse jet air cleaning mechanism, rated at 300,000 acfm @ 450° F;
- DD. Cement kiln system fabric collector exhaust fan (51-FA-11) rated at 300,000 acfm @ 17 inches w.c. and 450° F, 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;
- EE. Cement kiln system exhaust ductwork, 7 ft. 6 in. ID, from evaporative cooling tower (51-CT-01), to cement kiln system fabric collector (51-BH-02); and
- FF. Fabric collector (51-BH-02) exhaust ductwork, 8 ft. 6 in ID, from exhaust fan to exhaust stack. (existing)
- GG. 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.

OPERATIONAL CONDITIONS:

1. 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 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)
2. If opacity of stack emissions equals or exceeds 5% or Ringelmann No. 1/4 during normal operation, District-witnessed particulate emissions sampling shall be performed to demonstrate compliance with particulate emission limits. (Rules 108.1 and 209)
3. All fines collected in dust collectors shall be returned to process. (Rule 210.1)
4. Exhaust stack gas NO_x emissions shall not exceed 3.40 lb/ton of clinker (as NO₂) when averaged over any 30 consecutive day period, excluding periods of non-production. (Rules 425.3 and 210.1 BACT)
5. 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)
6. All raw material conveyors upstream of cement kiln system shall be covered/enclosed and shall not exhibit visible emissions. (Rules 209 and 210.1)
7. Each fabric collector shall have operational differential pressure indicator(s). (Rule 210.1)
8. Cement kiln system shall be fired only with petroleum coke, natural gas, fuel oil, or TDF. No other combustible products shall be added to cement kiln system without prior written permission of Control Officer. (Rule 210.1)
9. Compliance with all operational conditions shall be verified by appropriate record keeping, including records of clinker production and other operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 107)
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)

Emission Unit 042 Permit Conditions

11. TDF shall not exceed the percentage by weight of total pyroprocessing system fuel, as listed in “Special Conditions ff and gg” and calculated over a 180 minute rolling average without prior District approval and toxics testing. (Rule 210.1 and per application)
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. Equipment breakdowns resulting in non-compliance with any emission limitations shall be reported pursuant to Rules 111 and 422. (Rule 422, Subpart F)
14. 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 lbm/ton of kiln feed. (Rules 210.1 and 422, Subpart F)
15. 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.
16. Exhaust stack shall be equipped with continuous emission monitors/ recorders, secured against tampering after calibration, for opacity, and nitrogen oxides; and 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. (Rules 209 and 210.1)
17. 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 require sampling, of emission sources. (Rule 107)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

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

COMPLIANCE TESTING REQUIREMENTS:

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 1/24th 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 EKAPCD Guidelines for Compliance Testing, within 30 days of District request. (Rule 108.1)

Emission Unit 042 Permit Conditions

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 lbm/ton of feed to kiln (Rule 422)
40.00 lbm/hr
960.00 lbm/day
175.20 ton/yr

From Kiln Feed Fabric Collector (51-DC-08):
0.01 gr/acfm
0.70 lbm/hr
16.87 lbm/day
3.08 ton/yr

From Kiln Feed Fabric Collector (51-DC-09):
0.01 gr/acfm
0.61 lbm/hr
14.61 lbm/day
2.67 ton/yr

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

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

Sulfur Oxides:

From Kiln Fabric Collector (51-BH-02):
53.83 lbm/hr (as SO₂)
1,291.92 lbm/day (as SO₂)
5.83 lbm/hr (as SO₄)
139.92 lbm/day (as SO₄)

Emission Unit 042 Permit Conditions

Oxides of Nitrogen (as NO₂):

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

| | |
|-----------|--------------------------------------|
| 3.4 | lbm/ton of clinker (Rule 210.1 BACT) |
| 481.67 | lbm/hr (Rule 210.1 BACT) |
| 11,560.00 | lbm/day (30 day rolling average) |
| 1,992.90 | ton/yr (365 day rolling average) |

Volatile Organic Compounds (VOC):

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

| | |
|--------|---------|
| 240.00 | lbm/day |
| 43.80 | ton/yr |

Carbon Monoxide:

From Kiln Fabric Collector 51-BH-02

| | |
|-----------|---------|
| 1,200.00 | lbm/hr |
| 28,800.00 | lbm/day |
| 5,256.00 | ton/yr |

Dioxins/ Furans:

From Kiln Fabric Collector 51-BH-02

| | |
|-----|------------------------|
| 0.4 | ng TEQ/dscm (Rule 419) |
|-----|------------------------|

(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. 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). (Rules 209 and 210.1)
- bb. Visible fugitive dust emissions from all haul roads shall not exceed 10% opacity. (Rules 209 and 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)

Emission Unit 042 Permit Conditions

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

| Source | Maximum Throughput | PM-10 Emissions |
|---|---------------------------|------------------------|
| | Tons/Year | Tons/Year |
| Quarry Drilling | 1,726,452 | 0.09 |
| Quarry Blasting | 1,726,452 | 3.89 |
| | Maximum | |
| | Vehicles Miles | Tons/Year |
| Haul Road | 270,188 | 447.97 |
| Waste Dust Haul Road | 0 | 0 |
| Waste Dust Stockpile | 0 | 0 |
| Total PM-10 Emissions in Tons Per Year | | 451.95 |

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

- ee. No new unpaved roadways shall be constructed or utilized without prior written approval from District. (Rule 210.1)
- ff. National Cement shall perform toxic air contaminant testing within sixty days of the steady state operation of the kiln utilizing 37-42 percent TDF as a replacement fuel. Emission values from TDF source testing shall be used to update air dispersion modeling performed for the health risk assessment used for the TDF Addendum EIR. The health risk assessment shall be submitted to the District within 180 days of achieving 37-42 percent TDF utilization. After testing is completed, National Cement shall not utilize TDF in amounts greater than 32 percent until the revised health risk assessment has been received and the District has determined that the revised health risk assessment for 37-42 percent TDF utilization are consistent with the TDF Addendum EIR. Upon approval of the health risk assessment for 37 to 42 percent TDF utilization, TDF limitation shall be 42 percent or less. (Rule 419, CEQA and CH&SC 41700)
- gg. National Cement shall perform toxic air contaminant testing within sixty days of the steady state operation of the kiln utilizing 46-50 percent TDF as a replacement fuel. Emission values from TDF source testing shall be used to update air dispersion modeling performed for the health risk assessment used for the TDF Addendum EIR. The health risk assessment shall be submitted to the District within 180 days of achieving 46-50 percent TDF utilization. Except during a specified period of testing equipment and emissions approved by the APCO at least 30 days prior to testing, National Cement shall not utilize TDF in amounts greater than the percentage allowed by “Special Condition ff” until the revised health risk assessment has been received and the District has determined that the revised health risk assessment for 46-50 percent TDF utilization are consistent with the TDF Addendum EIR. Upon approval of the health risk assessment, TDF usage limitation shall be the maximum percentage in the range of TDF used for the most current and approved health risk assessment. (Rule 419, CEQA and CH&SC 41700)

Emission Unit 042 Permit Conditions

- hh. If results from TDF source testing shows a cancer impact of greater than one in one million or a net increase of 0.2 for the total hazard index for any off-site receptor, then National Cement will be allowed to retest if necessary according to protocol approved by the APCO. The baseline value used to determine the net increase of the total hazard index shall be determined, agreed upon and documented in the protocol at least 30 days prior to the source test. If subsequent TDF testing produces unacceptable cancer or total hazard index values then National Cement shall submit an application for ATC modification proposing reduction of TDF utilization to a level providing acceptable health risk assessment values. Application shall be submitted within 180 days of the latest TDF source test producing the unacceptable health impact value. (Rule 419, CEQA and CH&SC 41700)

DRAFT

**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)

Standard

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|--------------|--|
| §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(b) | On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any clinker cooler any gases which: |
| §60.62(b)(4) | If the kiln has a separate alkali bypass stack, you must combine the PM emissions from the bypass stack with the PM emissions from the main kiln exhaust to determine total PM emissions. |

Monitoring, Testing, Recordkeeping, and Reporting

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| §60.63(b) | <i>Clinker production monitoring requirements.</i> For any kiln subject to an emissions limitation on PM, NO _x , or SO ₂ emissions (lb/ton of clinker), you must: |
| §60.63(b)(1) | (1) Determine hourly clinker production by one of two methods: (i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of clinker produced in tons of mass per hour. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy. (ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates of the amount of feed to the kiln in tons of mass per hour. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed-to-clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio should be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated; |
| §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(b)(4) | Develop an emissions monitoring plan in accordance with paragraphs (i)(1) through (i)(4) of this section. |
| §60.63(h) | You must install, operate, calibrate, and maintain instruments for continuously measuring and recording the pollutant per mass flow rate to the atmosphere for each kiln subject to the PM emissions limits in §60.62(a)(1)(i) and (ii), the NO _x emissions limit in §60.62(a)(3), or the SO ₂ emissions limit in §60.62(a)(4) according to the requirements in paragraphs (h)(1) through (10) of this section. (1) The owner or operator must install each sensor of the flow rate monitoring system in a location that provides |

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| | <p>representative measurement of the exhaust gas flow rate at the sampling location of the NO_x, SO₂ or PM CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.</p> <p>(2) The flow rate monitoring system must be designed to measure the exhaust gas flow rate over a range that extends from a value of at least 20 percent less than the lowest expected exhaust flow rate to a value of at least 20 percent greater than the highest expected exhaust gas flow rate.</p> <p>(3) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate.</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 (h)(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) (<i>see</i> sections 3.1 and 8.3 of Performance Specification 2 in Appendix B to part 60 of this chapter for a discussion of CD).</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 noted in paragraphs (h)(8)(i) and (ii).</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 (h)(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> |
| §60.63(i) | <p><i>Development and Submittal (Upon Request) of Monitoring Plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (i)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (h) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph §63.1350(m)(10) of this chapter.</p> <p>(1) For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (i)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days</p> |

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| | <p>before the initial performance evaluation of your CMS.</p> <p>(i) Installation of the CEMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> <p>(2) In your site-specific monitoring plan, you must also address paragraphs (i)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> <p>(3) You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> <p>(4) You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p> |
| §60.64(a) | In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). |
| §60.64(b) | Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63. |
| §60.64(b)(1) | <p>The PM emissions rate is calculated using Equation 2 of this section:</p> $E = (C_s Q_s) / (PK) \quad (\text{Eq. 2})$ <p>Where:</p> <p>E = emission rate of particulate matter, lb/ton of kiln feed;</p> <p>C_s = concentration of particulate matter, gr/scf;</p> <p>Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (either wet or dry), dscf/hr;</p> <p>P = total kiln feed (dry basis) rate, ton/hr. For kilns constructed, modified or reconstructed on or after June 16, 2008,</p> <p>p = total kiln clinker production rate; and</p> <p>K = conversion factor, 7000 gr/lb.</p> |
| §60.64(b)(2) | Suitable methods shall be used to determine the kiln feed rate (P), except fuels. |

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| §60.64(b)(5) | If your kiln is not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60, and the kiln (including any associated alkali bypass and clinker cooler) was constructed, modified or reconstructed on or after June 16, 2008, you must conduct a performance test every 5 years following the initial performance test. Kilns (including any associated alkali bypass and clinker cooler) constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 must conduct a performance test every 5 years if not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60. |
| §63.1350(m)(10) | <p><i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p> |

Recordkeeping

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

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

Standard

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

Monitoring and Testing

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

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

Standard

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

Monitoring, Testing, Recordkeeping, and Reporting

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| §60.63(i) | <i>Development and Submittal (Upon Request) of Monitoring Plans.</i> If you demonstrate compliance with any applicable emission limit through performance stack testing or other emissions monitoring, you must develop a site-specific monitoring plan according to the requirements in paragraphs (i)(1) through (4) of this section. This requirement also applies to you if you petition the EPA Administrator for alternative monitoring parameters under paragraph (h) of this section and §63.8(f). If you use a BLDS, you must also meet the requirements specified in paragraph §63.1350(m)(10) of this chapter. (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. |
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| | <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) | Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63. |
| §60.64(b)(5) | If your kiln is not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60, and the kiln (including any associated alkali bypass and clinker cooler) was constructed, modified or reconstructed on or after June 16, 2008, you must conduct a performance test every 5 years following the initial performance test. Kilns (including any associated alkali bypass and clinker cooler) constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 must conduct a performance test every 5 years if not equipped with a PM CEMS meeting the requirements of Performance Specification 11 of Appendix B to part 60. |
| §63.1350(m)(10) | <p><i>Parameter monitoring requirements.</i> If you have an operating limit that requires the use of a CMS, you must install, operate, and maintain each continuous parameter monitoring system (CPMS) according to the procedures in paragraphs (n)(1) through (4) of this section by the compliance date specified in §63.1351. You must also meet the applicable specific parameter monitoring requirements in paragraphs (m)(5) through (m)(11) that are applicable to you.</p> <p>(10) <i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> |

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

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

§60.62(b)(2)

Standard

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

Monitoring and Testing

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

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

Standard

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| §60.62(c) | On and after the date on which the performance test required to be conducted by §60.8 is completed, you may not discharge into the atmosphere from any affected facility other than the kiln and clinker cooler any gases which exhibit 10 percent opacity, or greater. |
| §63.1350(f)(3) | <i>Corrective actions.</i> If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347. |

Monitoring, Testing, Recordkeeping, and Reporting

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| §60.64(a) | In conducting the performance tests required in §60.8, you must use reference methods and procedures and the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). |
| §60.64(b) | Compliance with the PM standards in §60.62 is determined using the procedures specified in §60.63. |
| §60.64(b)(3) | Method 9 and the procedures in §60.11 must be used to determine opacity. |
| §60.64(b)(4) | Any sources other than kilns (including associated alkali bypass and cooler) subject to the 10 percent opacity limit must follow the appropriate monitoring procedures in §63.1350(f), (m)(1) through (4), (m)(10) through (11), (o), and (p) of this chapter. |
| §63.1350(f) | <i>Opacity monitoring requirements.</i> If you are subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of this section and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of this section and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of this section. |
| §63.1350(f)(1)(i) | You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation. |
| §63.1350(f)(1)(ii) | If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. |
| §63.1350(f)(1)(iii) | If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. |
| §63.1350(f)(1)(iv) | If visible emissions are observed during any Method 22 performance test, of appendix A-7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A-4 to part 60 of this chapter. The Method 9 performance test, of appendix A-4 to part 60 of this chapter, must |

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| | begin within 1 hour of any observation of visible emissions. |
| §63.1350(f)(1)(v) | The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan. |
| §63.1350(f)(1)(vi) | If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section. |
| §63.1350(f)(1)(vii) | If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes. |
| §63.1350(f)(2)(i) | For a raw mill or finish mill, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of this chapter. The duration of the Method 22 performance test must be 6 minutes. |
| §63.1350(f)(2)(ii) | Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. |
| §63.1350(f)(2)(iii) | If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (a)(5)(ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (a)(5)(i) of the section, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The duration of the Method 9 test must be 30 minutes. |
| §63.1350(f)(4) | The requirements under paragraph (f)(2) of this section to conduct daily Method 22 testing do not apply to any specific raw mill or finish mill equipped with a continuous opacity monitoring system (COMS) or bag leak detection system (BLDS). |
| §63.1350(f)(4)(i) | If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS–1 of appendix B to part 60 of this chapter. |
| §63.1350(f)(4)(ii) | If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply. |
| §63.1350(m) | <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. |
| §63.1350(m)(1) | The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data. |
| §63.1350(m)(2) | You must conduct all monitoring in continuous operation at all times that the unit is operating. |

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| §63.1350(m)(3) | Determine the 3-hour block average of all recorded readings. |
| §63.1350(m)(4) | Record the results of each inspection, calibration, and validation check. |
| §63.1350(m)(10) | <p><i>Bag leak detection monitoring requirements.</i> If you elect to use a fabric filter bag leak detection system to comply with the requirements of this subpart, you must install, calibrate, maintain, and continuously operate a bag leak detection system as specified in paragraphs (m)(10)(i) through (viii) of this section.</p> <p>(i) You must install and operate a bag leak detection system for each exhaust stack of the fabric filter.</p> <p>(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.</p> <p>(iii) The bag leak detection system must be certified by the manufacturer to be capable of detecting particulate matter emissions at concentrations of 10 or fewer milligrams per actual cubic meter.</p> <p>(iv) The bag leak detection system sensor must provide output of relative or absolute particulate matter loadings.</p> <p>(v) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.</p> <p>(vi) The bag leak detection system must be equipped with an alarm system that will alert an operator automatically when an increase in relative particulate matter emissions over a preset level is detected. The alarm must be located such that the alert is detected and recognized easily by an operator.</p> <p>(vii) For positive pressure fabric filter systems that do not duct all compartments of cells to a common stack, a bag leak detection system must be installed in each baghouse compartment or cell.</p> <p>(viii) Where multiple bag leak detectors are required, the system's instrumentation and alarm may be shared among detectors.</p> |
| §63.1350(m)(11) | <p>For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:</p> <p>(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;</p> <p>(ii) Sealing off defective bags or filter media;</p> <p>(iii) Replacing defective bags or filter media or otherwise repairing the control device;</p> <p>(iv) Sealing off a defective fabric filter compartment;</p> <p>(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or</p> <p>(vi) Shutting down the process producing the PM emissions.</p> |
| §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, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.</p> |
| §63.1350(o)(2) | <p>If the application to use an alternate monitoring requirement is approved, you must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.</p> |

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| §63.1350(o)(3) | <p>You must submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (m)(3)(i) through (iii) of this section:</p> <p>(i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;</p> <p>(ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach and technique, the averaging period for the limit, and how the limit is to be calculated; and</p> <p>(iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.</p> |
| §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> |
| §63.1350(p)(1) | <p>For each continuous monitoring system (CMS) required in this section, you must develop, and submit to the permitting authority for approval upon request, a site-specific monitoring plan that addresses paragraphs (o)(1)(i) through (iii) of this section. You must submit this site-specific monitoring plan, if requested, at least 60 days before your initial performance evaluation of your CMS.</p> <p>(i) Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device);</p> <p>(ii) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and</p> <p>(iii) Performance evaluation procedures and acceptance criteria (e.g., calibrations).</p> |
| §63.1350(p)(2) | <p>In your site-specific monitoring plan, you must also address paragraphs (o)(2)(i) through (iii) of this section.</p> <p>(i) Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii);</p> <p>(ii) Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and</p> <p>(iii) Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i).</p> |
| §63.1350(p)(3) | <p>You must conduct a performance evaluation of each CMS in accordance with your site-specific monitoring plan.</p> |
| §63.1350(p)(4) | <p>You must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan.</p> |
| §63.1350(p)(5) | <p><i>BLDS monitoring plan.</i> Each monitoring plan must describe the items in paragraphs (o)(5)(i) through (v) of this section. At a minimum, you must retain records related to the site-specific monitoring plan and information discussed in paragraphs (m)(1) through (4), (m)(10) and (m)(11) of this section for a period of 5 years, with at least the first 2 years on-site;</p> <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> |

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| | <ul style="list-style-type: none">(iii) Operation of the BLDS, including quality assurance procedures;(iv) How the BLDS will be maintained, including a routine maintenance schedule and spare parts inventory list;(v) How the BLDS output will be recorded and stored. |
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**FEDERAL REGULATIONS
NESHAPS SUBPART LLL**

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

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

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| §63.1356 | If an affected facility subject to this subpart has a different emission limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement. |
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Parts of plant included in subpart LLL. § 63.1340

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| §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"> (1) Each kiln including alkali bypasses, except for kilns that burn hazardous waste and are subject to and regulated under subpart EEE of this part; (2) Each clinker cooler at any portland cement plant; (3) Each raw mill at any portland cement plant; (4) Each finish mill at any portland cement plant; (5) Each raw material dryer at any portland cement plant; (6) Each raw material, clinker, or finished product storage bin at any portland cement plant; (7) Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln at any portland cement plant; (8) Each bagging and bulk loading and unloading system at any portland cement plant; and (9) Each open clinker pile at any portland cement plant. |
| §63.1340(c) | 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. |
| §63.1343(a) | <i>General.</i> The provisions in this section apply to each kiln and any alkali bypass associated with that kiln, clinker cooler, and raw material dryer. All dioxin D/F, HCl, and total hydrocarbon (THC) emission limits are on a dry basis. The D/F, HCl and THC limits for kilns are corrected to 7 percent oxygen except during periods of startup and shutdown. The raw material dryer THC limits are corrected to 19 percent oxygen except during startup and shutdown. During startup and shutdown no oxygen correction is applied. All (THC) emission limits are measured as propane. Standards for mercury, PM, and THC are based on a 30-day rolling average, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. The 30-day and 7-day periods mean 30 and 7 consecutive operating days, respectively, where an operating day is any daily 24-hour period during which the kiln operates. Data attributed to an operating day includes all valid data obtained during the daily 24-hour period and excludes any measurements made when the kiln was not operating. If using a CEMS to determine compliance with the HCl standard, this standard is based on a 30-day rolling average, |

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| | except for periods of startup and shutdown, where the standard is based on a 7-day rolling average. You must ensure appropriate corrections for moisture are made when measuring flowrates used to calculate particulate matter (PM) and mercury emissions. |
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Standards for kilns, clinker coolers, raw material dryers, and open clinker piles. §63.1343

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| §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. |
| §63.1343(b)(2) | <p>When there is an alkali bypass associated with a kiln, the combined PM emissions from the kiln or in-line kiln/raw mill and the alkali bypass stack are subject to the PM emissions limit. Existing kilns that combine the clinker cooler exhaust with the kiln exhaust for energy efficiency purposes and send the combined exhaust to the PM control device as a single stream may meet an alternative PM emissions limit. This limit is calculated using the equation 1 of this section:</p> $PM_{air} = 0.004 \times 1.65 \times (Q_k + Q_c) / 1000 \quad (\text{Eq. 1})$ <p>Where:</p> <p>0.004 is the PM exhaust concentration (gr/dscf) equivalent to 0.04 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined.</p> <p>1.65 is the conversion factor of lb feed per lb clinker</p> <p>Q_k is the exhaust flow of the kiln (dscf/ton raw feed)</p> <p>Q_c is the exhaust flow of the clinker cooler (dscf/ton raw feed).</p> <p>For new kilns that combine kiln exhaust and clinker cooler gas the limit is calculated using the equation 2 of this section:</p> $PM_{air} = 0.0008 \times 1.65 \times ((Q_k + Q_c) / 1000) \quad (\text{Eq. 2})$ <p>Where:</p> <p>0.0008 is the PM exhaust concentration (gr/dscf) equivalent to 0.01 lb per ton clinker where clinker cooler and kiln exhaust gas are not combined</p> <p>1.65 is the conversion factor of lb feed per lb clinker</p> <p>Q_k is the exhaust flow of the kiln (dscf/ton raw feed)</p> <p>Q_c is the exhaust flow of the clinker cooler (dscf/ton raw feed).</p> |
| §63.1343(c) | <p>If clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:</p> <p>(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.</p> <p>(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of</p> |

the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.

(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.

(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.

§63.1343(d) If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.

§63.1343(e) Emissions limits in effect prior to September 9, 2010. Any source defined as an existing source in §63.1351, and that was subject to a PM, mercury, THC, D/F, or opacity emissions limit prior to September 9, 2010, must continue to meet the limits shown in Table 2 to this section until September 9, 2013.

§63.1343 Table 1 **Table 1—Emissions Limits for Kilns (Rows 1–8), Clinker Coolers (Rows 9–12), Raw Material Dryers (Rows 13–15), Raw and Finish Mills (Row 16)**

| | If your source is | And the operating mode is: | And if is located | Your emissions limits are: | And the units of the emissions limit are: | The oxygen correction factor is: |
|----|--------------------------|-----------------------------------|---------------------------|---|--|---|
| 1. | An existing kiln | Normal operation | At a major or area source | PM—0.04 D/F—0.2 ¹ Mercury—55 THC—24 ^{2,3} | lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd | NA. 7 percent. NA. 7 percent. |
| 2. | An existing kiln | Normal operation | At a major source | HCl—3 | ppmvd | 7 percent. |
| 3. | An existing kiln | Startup and shutdown | At a major or area source | PM—0.004 D/F—0.2 ¹ Mercury—10 THC—24 ^{2,3} | gr/dscf ng/dscm (TEQ) ug/dscm ppmvd | NA. NA. NA. NA. |
| 4. | An existing kiln | Startup and shutdown | At a major source | HCl—3 ⁴ | ppmvd | NA. |
| 5. | A new kiln | Normal operation | At a major or area source | PM—0.01 D/F—0.2 ¹ Mercury—21 THC—24 ^{2,3} | lb/ton clinker ng/dscm (TEQ) lb/MM tons clinker ppmvd | NA. 7 percent. NA. 7 percent. |
| 6. | A new kiln | Normal operation | At a major source | HCl—3 ⁴ | ppmvd | 7 percent. |
| 7. | A new kiln | Startup or shutdown | At a major or area source | PM—0.0008 D/F—0.2 ¹ Mercury—4 THC—24 ^{2,3} | gr/dscf ng/dscm (TEQ) ug/dscm ppmvd | NA. NA. NA. NA. |

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|----|------------|----------------------|-------------------|-------|-------|-----|
| 8. | A new kiln | Startup and shutdown | At a major source | HCl—3 | ppmvd | NA. |
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| | 9. | An existing clinker cooler | Normal operation | At a major or area source | PM—0.04 | lb/ton clinker | NA. |
| | 10. | An existing clinker cooler | Startup and shutdown | At a major or area source | PM—0.004 | gr/dscf | NA. |
| | 11. | A new clinker cooler | Normal operation | At a major or area source | PM—0.01 | lb/ton clinker | NA. |
| | 12. | A new clinker cooler | Startup and shutdown | At a major or area source | PM—0.0008 | gr/dscf | NA. |
| | 13. | An existing or new raw material dryer | Normal operation | At a major or area source | THC—24 ^{2,3} | ppmvd | 19 percent. |
| | 14. | An existing or new raw material dryer | Startup and shutdown | At a major or area source | THC—24 ^{2,3} | ppmvd | NA. |
| | 15. | An existing or new raw material dryer | All operating modes | At a major source | Opacity—10 | percent | NA. |
| | 16. | An Existing or new raw or finish mill | All operating modes | At a major source | Opacity-10 | percent | NA. |

¹ If the average temperature at the inlet to the first particulate matter control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.4 ng/dscm (TEQ).

² Measured as propane.

³ Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 9 ppmvd for total organic HAP. If the source demonstrates compliance with the total organic HAP under the requirements of §63.1349 then the source's THC limit will be adjusted to equal the average THC emissions measured during the organic HAP compliance test.

⁴ If the kiln does not have a HCl CEM, the emissions limit is zero.

§63.1343
Table 2

Table 2—Emissions Limits in Effect Prior to September 9, 2010, for Kilns (Rows 1–4), Clinker Coolers (Row 5), and Raw Material Dryers (Rows 6–9).

| | If your source is | and | And if it is located at | Your emissions limits are¹: | And the units of the emissions limit are: |
|----|--------------------------|---|--------------------------------|--|--|
| 1. | An existing kiln | it commenced construction or reconstruction on or prior to December 2, 2005 | A major source | PM—0.3 Opacity—20 D/F—0.2 ² THC—50 ^{3,4} | lb/ton feed percent ng/dscm (TEQ) ppmvd. |
| 2. | An existing kiln | it commenced construction or reconstruction after December 2, 2005 | A major source | PM—0.3 Opacity—20 D/F—0.2 ² THC—20 ^{3,5} Mercury—41 ⁶ | lb/ton feed percent ng/dscm (TEQ) ppmvd ug/dscm. |

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| 3. | An existing kiln | it commenced construction or reconstruction on or prior to December 2, 2005 | An area source | D/F—0.2 ² THC—50 ³⁴ | ng/dscm (TEQ) ppmvd. |
| 4. | An existing kiln | it commenced construction or reconstruction after December 2, 2005 | An area source | D/F—0.2 ² THC—20 ³⁵ Mercury—41 ⁶ | ng/dscm (TEQ) ppmvd ug/dscm. |
| 5. | An existing clinker cooler | NA | A major source | PM—0.1 Opacity—10 | lb/ton feed percent. |
| 6. | An existing raw material dryer | it commenced construction or reconstruction on or prior to December 2, 2005 | A major source | THC—50 ³⁴ Opacity—10 | ppmvd percent. |
| 7. | An existing raw material dryer | it commenced construction or reconstruction after December 2, 2005 | A major source | THC—20 ³⁵ Opacity—10 | ppmvd percent. |
| 8. | An existing raw material dryer | it commenced construction or reconstruction on or prior to December 2, 2005 | An area source | THC—50 ³⁴ | ppmvd. |
| 9. | An existing raw material dryer | it commenced construction or reconstruction after December 2, 2005 | An area source | THC—20 ³⁵ | ppmvd. |

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

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

³ Measured as propane.

⁴ Only applies to Greenfield kilns or raw material dryers.

⁵ As an alternative, a source may demonstrate a 98 percent reduction in THC emissions from the exit of the kiln or raw material dryer to discharge to the atmosphere. Inline raw mills are considered to be an integral part of the kiln.

⁶ As an alternative, a source may route the emissions through a packer bed or spray tower wet scrubber with a liquid-to-gas ratio of 30 gallons per 1000 actual cubic feet per minute or more and meet a site-specific emission limit based on the measured performance of the wet scrubber.

Operating limits for kilns. §63.1346

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| §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) | <p>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).</p> |
| §63.1346(c) | <p>For an affected source subject to a D/F emission limitation under §63.1343 that employs sorbent injection as an emission control technique you must operate the sorbent injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.</p> <p>(1) The three-hour rolling average activated sorbent injection rate must be equal to or greater than the sorbent injection rate determined in accordance with §63.1349(b)(3)(vi).</p> <p>(2) You must either:</p> <p>(i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c), or</p> <p>(ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).</p> |
| §63.1346(d) | <p>Except as provided in paragraph (e) of this section, for an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique you must specify and use the brand and type of sorbent used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.</p> |
| §63.1346(e) | <p>For an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique you may substitute, at any time, a different brand or type of sorbent provided that the replacement has equivalent or improved properties compared to the sorbent specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute sorbent will provide the same or better level of control as the original sorbent.</p> |

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| §63.1346(f) | No kiln may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent, unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (<i>i.e.</i> , emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline. Once the kiln must comply with a mercury limit specified in §63.1343, this paragraph no longer applies. |
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Operation and maintenance plan requirements. §63.1347

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| §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 of §§63.1343 through 63.1348;</p> <p>(2) Corrective actions to be taken when required by paragraph §63.1350(f)(3);</p> <p>(3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.</p> |
| §63.1347(b) | Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard. |

Compliance Requirements. §63.1348

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| §63.1348(a) | <p><i>Initial compliance requirements.</i> For an affected source subject to this subpart, you must demonstrate initial compliance with the emissions standards and operating limits by using the test methods and procedures in §§63.1349 and 63.7.</p> <p>(1) <i>PM compliance.</i> If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate initial compliance with the PM emissions standards by using the test methods and procedures in §63.1349(b)(1).</p> <p>(i) You must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(1)(i).</p> <p>(ii) Compliance with the PM emissions standard must be determined based on the first 30 operating days you operate a PM CEMS.</p> <p>(2) <i>Opacity compliance.</i> If you are subject to the limitations on opacity under §63.1345, you must demonstrate initial compliance with the opacity emissions standards by using the performance test methods and procedures in §63.1349(b)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in initial compliance with the standard.</p> <p>(3) <i>D/F compliance.</i> (i) If you are subject to limitations on D/F emissions under §63.1343(b), you must demonstrate initial compliance with the D/F emissions standards by using the performance test methods and procedures in §63.1349(b)(3). The owner or operator of a kiln with an in-line raw mill must demonstrate initial compliance by conducting separate performance tests while the raw mill is operating and the raw mill is not operating. The D/F concentration must be determined for each run and the arithmetic average of the concentrations measured for the three runs must be calculated to determine compliance.</p> <p>(ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the temperature operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(ii) through (b)(3)(iv). The average of the run temperatures will determine the applicable temperature limit.</p> |
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| | <p>(iii) If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate initial compliance with the activated carbon injection rate operating limits specified in §63.1344 by using the performance test methods and procedures in §63.1349(b)(3)(v). The average of the run injection rates will determine the applicable injection rate limit.</p> <p>(iv) If activated carbon injection is used, you must also develop a carrier gas parameter during the performance test conducted under §63.1349(b)(3) that meets the requirements of §63.1349(b)(3)(vi). Compliance is demonstrated if the system is maintained within ± 5 percent accuracy during the performance test.</p> <p>(4)(i) <i>THC compliance.</i> If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate initial compliance with the THC emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(i). The average THC concentration obtained during the first 30 operating days must be used to determine initial compliance.</p> <p>(ii) <i>Total organic HAP emissions tests.</i> If you elect to demonstrate compliance with the total organic HAP emissions limit under §63.1343(b) in lieu of the THC emissions limit, you must demonstrate initial compliance with the total organic HAP emissions standards by using the performance test methods and procedures in §63.1349(b)(4)(iii) and (b)(4)(iv).</p> <p>(iii) If you are demonstrating initial compliance, you must conduct the separate performance tests as specified in §63.1349(b)(4)(iii) while the raw mill kiln is operating and while the raw mill of the kiln is not operating.</p> <p>(iv) The average total organic HAP concentration measured during the initial performance test specified by §63.1349(b)(4)(iii) must be used to determine initial compliance.</p> <p>(v) The average THC concentration measured during the initial performance test specified by §63.1349(b)(4)(iv) must be used to determine the site-specific THC limit. This limit should be a weighted average of the THC levels measured during raw mill on and raw mill off testing.</p> <p>(5) <i>Mercury compliance.</i> If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate initial compliance with the mercury standards by using the performance test methods and procedures in §63.1349(b)(5). You must demonstrate initial compliance by operating a mercury CEMS or a sorbent trap based integrated monitor. The first 30 operating days of daily mercury concentration data must be used to determine initial compliance.</p> <p>(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 or tray tower, you must demonstrate initial compliance by conducting a performance test as specified in §63.1349(b)(6)(i). The HCl 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. You must also have established appropriate site-specific parameter limits.</p> <p>(ii) For an affected source that is not equipped with a wet scrubber or tray tower, you must demonstrate initial compliance by operating a CEMS as specified in §63.1349(b)(6)(ii). The average hourly HCl concentration obtained during the first 30 operating days must be used to determine initial compliance.</p> |
| §63.1348(b) | <p><i>Continuous compliance requirements.</i> You must demonstrate continuous compliance with the emissions standards and operating limits by using the performance test methods and procedures in §§63.1350 and 63.8 for each affected source.</p> <p>(1) <i>General requirements.</i> (i) You must monitor and collect data according to §63.1350 and the site-specific monitoring plan required by §63.1350(o).</p> <p>(ii) Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), you must operate the monitoring system and collect data at all required intervals at all times the affected source is operating. Any period for which data</p> |

collection is required and the operation of the CEMS is not otherwise exempt and for which the monitoring system is out-of-control and data are not available for required calculations constitutes a deviation from the monitoring requirements.

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

(iv) *Clinker production.* If you are subject to limitations on PM emissions (lb/ton of clinker) or mercury (lb/MM tons of clinker) under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by determining the hourly production rate of clinker according to the requirements of §63.1350(d).

(2) *PM compliance.* If you are subject to limitations on PM emissions under §63.1343(b), you must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) and (d).

(i) *PM CEMS.* You must demonstrate continuous compliance with the PM emissions standards by using the monitoring methods and procedures in §63.1350(b) for each affected source subject to PM emissions limitations. Continuous compliance is demonstrated by a 30-day rolling average PM emissions in lb/ton clinker, except for periods of startup and shutdown, where the compliance is demonstrated based on a 7-day rolling average.

(3) *Opacity compliance.* If you are subject to the limitations on opacity under §63.1345, you must demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in §63.1350(f).

(i) Continuous compliance is demonstrated by conducting specified visible emissions observations and follow up opacity readings, as indicated in §63.1350(f)(1) and (f)(2). The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard. Corrective actions must be initiated within one hour of detecting visible emissions.

(ii) *COMS.* If you install a COMS in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the COMS such that it meets the requirements of §63.1350(f)(4)(i).

(iii) *BLDS.* If you install a BLDS on a raw mill or finish mill in lieu of conducting the daily visible emissions testing, you must demonstrate continuous compliance by operating and maintaining the BLDS such that it meets the requirements of §63.1350(f)(4)(ii).

(4) *D/F compliance.* If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the temperature operating limits specified in §63.1346 by using the installing, operating, and maintaining a continuous monitor to record the temperature of specified gas streams such that it meets the requirements of §63.1350(g). Continuous compliance is demonstrated by a 3-hour rolling average temperature.

(5)(i) *Activated carbon injection compliance.* If activated carbon injection is used and you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the activated carbon injection rate operating limits specified in §63.1346 by installing, operating, and maintaining a continuous monitor to record the rate of activated carbon injection that meets the requirements of §63.1350(h)(1). Continuous compliance is demonstrated by a 3-hour rolling average injection rate.

(ii) If you are subject to a D/F emission limitation under §63.1343(b), you must demonstrate continuous compliance with the activated carbon injection system gas parameter by installing, operating, and maintaining a continuous monitor to record the gas parameter that meets the requirements of §63.1350(h)(2). Continuous compliance is demonstrated by a 3-hour rolling average of the parameter value.

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| | <p>(6) <i>THC compliance.</i> If you are subject to limitations on THC emissions under §63.1343(b), you must demonstrate continuous compliance with the THC emissions standards by using the monitoring methods and procedures in §63.1350 (i) and (j). Continuous compliance is demonstrated by a 30-day rolling average THC concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.</p> <p>(7) <i>Mercury compliance.</i> If you are subject to limitations on mercury emissions in §63.1343(b), you must demonstrate continuous compliance with the mercury standards by using the monitoring methods and procedures in §63.1350(k). Continuous compliance is demonstrated by a 30-day rolling average mercury emission rate in lb/MM tons clinker, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average mercury concentration.</p> <p>(8) <i>HCl compliance.</i> If you are subject to limitations on HCl emissions under §63.1343(b), you must demonstrate continuous 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 not equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(l)(1). Continuous compliance is demonstrated by a 30-day rolling average HCl concentration, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.</p> <p>(ii) For an affected source that is equipped with a wet scrubber or tray tower, you must demonstrate continuous compliance by using the monitoring methods and procedures in §63.1350(l)(2). Continuous compliance is demonstrated by a 30-day rolling average of the required parameters, except for periods of startup and shutdown, where the standard is based on a 7-day rolling average.</p> |
| §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> |
| §63.1351(c) | <p>The compliance date for existing sources for all the requirements that became effective on November 8, 2010 will be September 9, 2013.</p> |

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Performance testing requirements. §63.1349

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| §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> <ol style="list-style-type: none"> (1) A brief description of the process and the air pollution control system; (2) Sampling location description(s); (3) A description of sampling and analytical procedures and any modifications to standard procedures; (4) Test results; (5) Quality assurance procedures and results; (6) Records of operating conditions during the performance test, preparation of standards, and calibration procedures; (7) Raw data sheets for field sampling and field and laboratory analyses; (8) Documentation of calculations; (9) All data recorded and used to establish parameters for monitoring; and (10) Any other information required by the performance test method. |
| §63.1349(b) | <p>(1) <i>PM emissions tests.</i> (i)(A) If you are subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b).</p> <p>(B) You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in §63.1350(m)(5).</p> <p>(C) The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained.</p> <p>(ii) You must determine the clinker production rate using the methods in §63.1350(d).</p> <p>(iii) The emission rate, E, of PM (lb/ton of clinker) must be computed for each run using equation 3 of this section:</p> $E = (C_s Q_s) / (PK) \quad (\text{Eq. 3})$ <p>Where:</p> <p>E = emission rate of particulate matter, lb/ton of clinker production;</p> <p>C_s = concentration of particulate matter, gr/scf;</p> <p>Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (either wet or dry), scf/hr;</p> <p>P = total kiln clinker production rate, ton/hr; and</p> <p>K = conversion factor, 7000 gr/lb.</p> |

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

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

Where:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(v)(A) If sorbent injection is used for D/F control, the rate of sorbent injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of sorbent injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test in accordance with the conditions in §63.1350(m)(9), and the

continuous injection rate record(s) must be included in the performance test report. Sorbent injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.

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

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

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

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

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

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

(iii) Method 320 of appendix A to this part or ASTM D6348–03 (incorporated by reference— *See* §63.14) must be used to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run must be conducted for at least 1 hour.

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

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

(i) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in §63.1350(k)(4).

(ii) The emission rate must be computed by dividing the average mercury emission rate by the clinker production rate during the same 30-day rolling period using the equation 5 of this section:

$$E = (C, Q_2) / (PK) \quad (\text{Eq. 5})$$

Where:

E = emission rate of mercury, lb/million tons of clinker production;

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| | <p>C_s = concentration of mercury, g/scm;</p> <p>Q_s = volumetric flow rate of effluent gas, where C_s and Q_s are on the same basis (wet or dry), scm/hr;</p> <p>P = total kiln clinker production rate, million ton/hr; and</p> <p>K = conversion factor, 1000 g/kg (454 g/lb).</p> <p>(6) <i>HCl emissions tests.</i> For a source subject to limitations on HCl emissions you must conduct performance testing by one of the following methods:</p> <p>(i)(A) If the source is equipped with a wet scrubber, or tray tower, 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) .</p> <p>(B) You must establish site specific parameter limits by using the CPMS required in §63.1350(l)(1). 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.</p> <p>(ii)(A) If the source is not controlled by a wet scrubber, you must operate a CEMS in accordance with the requirements of §63.1350(l)(1). The initial performance test must be the first 30 operating days you use the CEMS.</p> <p>(B) The initial compliance test must be based on the 30 operating days in which the affected source operates using a CEMS. Hourly HCl concentration and stack gas volumetric flow rate data must be obtained.</p> |
| §63.1349(c) | <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. |
| §63.1349(d) | <i>Performance test reporting requirements.</i> <p>(1) You must submit the information specified in paragraphs (d)(1)(i) and (d)(2) of this section no later than 60 days following the initial performance test. All reports must be signed by the facility's manager.</p> <p>(i) The initial performance test data as recorded under paragraph (b) of this section.</p> <p>(ii) The values for the site-specific operating limits or parameters established pursuant to paragraphs (b)(3), (b)(4)(iii), (b)(5)(ii), and (b)(6)(i) of this section, as applicable, and a description, including sample calculations, of how the operating parameters were established during the initial performance test.</p> <p>(2) As of December 31, 2011 and within 60 days after the date of completing each performance evaluation or test, as defined in §63.2, conducted to demonstrate compliance with this subpart, you must submit the relative accuracy test audit data and performance test data, except opacity data, to EPA by successfully submitting the data electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool(ERT) (<i>see</i> http://www.epa.gov/ttn/chief/ert/ert_tool.html/).</p> |
| §63.1349(e) | Performance tests must be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance of the affected source for the period being tested. Upon request, you must make available to the Administrator such records as may be necessary to determine the conditions of performance tests. |
| §63.1352(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. |
| §63.1352(b) | Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at Portland cement manufacturing facilities, solely for use in |

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| | applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter. |
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Monitoring requirements. §63.1350

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| §63.1350(a) | All continuous monitoring data for periods of startup and shutdown must be compiled and averaged separately from data gathered during periods of normal operation. |
| §63.1350(b) | <p><i>PM monitoring requirements for sources using PM CEMS.</i> (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.</p> <p>(2) You must perform Relative Response Audits annually and Response Correlation Audits every 3 years.</p> <p>(3) If you are using a PM CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (n)(10) of this section.</p> <p>(4) In order to calculate the 30-day or 7-day rolling average, collect readings at least every 15 minutes. Sum the hourly data to daily data and then into a 30-day rolling average. You must use all data, except those recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities, in calculations.</p> |
| §63.1350(d) | <p><i>Clinker production monitoring requirements.</i> If you are subject to an emissions limitation on particulate matter, mercury, NO_x, or SO₂ emissions (lb/ton of clinker), you must:</p> <p>(1) Determine hourly clinker production by one of two methods:</p> <p>(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy.</p> <p>(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.</p> <p>(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).</p> <p>(3) Record the daily clinker production rates and kiln feed rates; and</p> <p>(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.</p> |
| §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 emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of this section and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of this section and in accordance with the operation and maintenance plan developed in accordance</p> |

with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of this section.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A-7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

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

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

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

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

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

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

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| | <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 continuous opacity monitoring system (COMS) or bag leak detection system (BLDS).</p> <p>(i) If the owner or operator chooses to install a COMS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, then the COMS must be installed at the outlet of the PM control device of the raw mill or finish mill and the COMS must be installed, maintained, calibrated, and operated as required by the general provisions in subpart A of this part and according to PS-1 of appendix B to part 60 of this chapter.</p> <p>(ii) If you choose to install a BLDS in lieu of conducting the daily visual emissions testing required under paragraph (f)(2) of this section, the requirements in paragraphs (m)(1) through (m)(4), (m)(10) and (m)(11) of this section apply.</p> |
| §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) Each hour, calculate the three-hour average temperature for the previous 3 hours of process operation using all of the one-minute data available (<i>i.e.</i>, the CMS is not out-of-control.)</p> <p>(5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on or from on to off, the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.</p> |
| §63.1350(h) | <p><i>Monitoring requirements for sources using sorbent injection.</i> If you are subject to an operating limit on D/F emissions that employs carbon injection as an emission control technique, you must comply with the additional monitoring requirements of paragraphs (h)(1) and (h)(2) and paragraphs (m)(1) through (m)(4) and (m)(9) 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) Install, operate, calibrate, and maintain a continuous monitor to record the rate of activated carbon injection. The accuracy of the rate measurement device must be ± 1 percent of the rate being measured.</p> <p>(i) Verify the calibration of the device at least once every three months.</p> <p>(ii) Each hour, calculate the three-hour rolling average activated carbon injection rate for the previous 3 hours of process operation using all of the one-minute data available (<i>i.e.</i>, the CMS is not out-of-control.)</p> |

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| | <p>(iii) 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 activated carbon injection rate must begin anew, without considering previous recordings.</p> <p>(2)(i) Install, operate, calibrate, and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the D/F performance test in accordance with §63.1349(b)(3).</p> <p>(ii) Each hour, calculate the three-hour rolling average of the selected parameter value for the previous 3 hours of process operation using all of the one-minute data available (<i>i.e.</i>, the CMS is not out-of-control.)</p> |
| §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 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter.</p> <p>(2) For sources equipped with an alkali bypass stack, instead of installing a CEMS, you may use the results of the initial or subsequent performance test to demonstrate compliance with the THC emission limit.</p> |
| §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 15 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of this chapter. In addition, you must follow the monitoring requirements in paragraphs (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> |
| §63.1350(k) | <p><i>Mercury monitoring requirements.</i> If you have a kiln or in-line kiln/raw mill subject to an emissions limitation on mercury emissions, you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter. You must continuously monitor mercury according to paragraphs (k)(1) through (k)(3) and (m)(1) through (m)(4) of this section. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of this section.</p> <p>(1) The span value for any Hg CEMS must include the intended upper limit of the mercury concentration measurement range during normal “mill on” operation which may be exceeded during “mill off” operation or other short term conditions lasting less than 24 consecutive kiln operating hours. However, the span should be at least equivalent to approximately two times the emissions standard and it may be rounded to the nearest multiple of 10 $\mu\text{g}/\text{m}^3$ of total mercury.</p> <p>(2) You must operate and maintain each Hg CEMS or sorbent trap-based integrated monitoring system according to the quality assurance requirements in Procedure 5 of appendix F to part 60 of this chapter.</p> <p>(3) Relative accuracy testing of mercury monitoring systems under Performance Specification 12A, Performance Specification 12B, or Procedure 5 must be at normal operating conditions with the raw mill on.</p> <p>(4) If you use a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (n)(10) of this section.</p> |
| §63.1350(l) | <p><i>HCl Monitoring Requirements.</i> If you are subject to an emissions limitation on HCl emissions in §63.1343, you must continuously monitor HCl according to paragraph (l)(1) and (2) and paragraphs (m)(1) through (m)(4) of</p> |

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| | <p>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) Continuously monitor compliance with the HCl limit by operating a continuous emission monitor in accordance with Performance Specification 15 of appendix B to part 60 of this chapter. You must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of 40 CFR 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 Performance Specification 15, or</p> <p>(2) Install, operate, and maintain a CMS to monitor wet scrubber parameters as specified in paragraphs (m)(5) and (m)(7) of this section.</p> |
| §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> |

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

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

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

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

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

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

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

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

(ii) Each bag leak detection system must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations and in accordance with the guidance provided in EPA-454/R-98-015, September 1997.

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

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

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

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

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

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

(11) For each BLDS, the owner or operator must initiate procedures to determine the cause of every alarm within 8 hours of the alarm. The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary. Corrective actions may include, but are not limited to the following:

(i) Inspecting the fabric filter for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in PM emissions;

(ii) Sealing off defective bags or filter media;

(iii) Replacing defective bags or filter media or otherwise repairing the control device;

(iv) Sealing off a defective fabric filter compartment;

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system; or

(vi) Shutting down the process producing the PM emissions.

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| <p>§63.1350(n)</p> | <p><i>Continuous emissions rate monitoring system.</i> You must install, operate, calibrate, and maintain instruments, according to the requirements in paragraphs (n)(1) and (2) of this section, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit.</p> <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 or PM CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate.</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) The flow rate monitoring system must have a minimum accuracy of 5 percent of the flow rate or greater.</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)(1) 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) (<i>see</i> sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of this chapter for a discussion of CD).</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> |
| <p>§63.1350(o)</p> | <p><i>Alternate monitoring requirements approval.</i> You may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (n)(1) through (n)(6) of this section.</p> |

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

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| | <p>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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Notification Requirements. §63.1353

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| <p>§63.1353(b)</p> | <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> |
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Reporting Requirements. §63.1354

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| §63.1354(a) | (a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report. |
| §63.1354(b) | <p>The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:</p> <p>(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.</p> <p>(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.</p> <p>(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.</p> <p>(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and</p> <p>(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.</p> <p>(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.</p> <p>(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).</p> <p>(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.</p> <p>(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:</p> <p>(i) All exceedances of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);</p> <p>(ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and</p> <p>(iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).</p> |

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| | <p>(iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).</p> <p>(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).</p> <p>(vi) Monthly rolling average mercury, THC, PM, and HCl (if applicable) emissions levels in the units of the applicable emissions limit for each kiln, clinker cooler, and raw material dryer.</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> |
| §63.1354(c) | The semiannual report required by paragraph (b)(9) of this section must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.1348(d), including actions taken to correct a malfunction. |

Recordkeeping Requirements. §63.1355

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| §63.1355(a) | The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche. |
| §63.1355(b) | <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) | In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c). |
| §63.1355(d) | You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system. |
| §63.1355(e) | You must keep records of the daily clinker production rates and kiln feed rates. |
| §63.1355(f) | You must keep records of the occurrence and duration of each startup or shutdown. |
| §63.1355(g) | <p>(1) You must keep records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air pollution control and monitoring equipment.</p> <p>(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> |

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**FEDERAL REGULATIONS
NESHAP SUBPART ZZZZ**

**National Emissions Standards for Hazardous Air Pollutants for 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.
40 CFR 63.6585**

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

Compliance §63.6595

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| §63.6595(a)(1) | If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than October 19, 2013. |
| §63.6595(a)(5) | If you start up your new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions after January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart upon startup of your affected source. |
| §63.6595(a)(6) | If you start up your new or reconstructed stationary RICE located at an area source of HAP emissions before January 18, 2008, you must comply with the applicable emission limitations and operating limitations in this subpart no later than January 18, 2008. |
| §63.6605(a) | You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times. |
| §63.6605(b) | At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control |

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

Emission limitations for new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 brake HP and less than or equal to 500 brake HP located at a major source of HAP emissions? §63.6601

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

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

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

Testing and initial compliance requirements. §63.6611

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| §63.6611 | If you own or operate a new or reconstructed 4SLB stationary RICE with a site rating of greater than or equal to 250 and less than or equal to 500 brake HP located at a major source of HAP emissions, you must conduct an initial performance test within 240 days after the compliance date that is specified for your stationary RICE in §63.6595 and according to the provisions specified in Table 4 to this subpart, as appropriate. |
| §63.6612 | If you own or operate an existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing stationary RICE located at an area source of HAP emissions you are subject to the requirements of § 63.6612(b). |
| §63.6612(b) | An owner or operator is not required to conduct an initial performance test on a unit for which a performance test has been previously conducted, but the test must meet all of the conditions described in paragraphs (b)(1) through (4) of this section. (1) The test must have been conducted using the same methods specified in this subpart, and these methods |

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| | <p>must have been followed correctly.</p> <p>(2) The test must not be older than 2 years.</p> <p>(3) The test must be reviewed and accepted by the Administrator.</p> <p>(4) Either no process or equipment changes must have been made since the test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.</p> |
| §63.6620(a) | You must conduct each performance test in Tables 3 and 4 of this subpart that applies to you. |
| §63.6620(b) | Each performance test must be conducted according to the requirements that this subpart specifies in Table 4 to this subpart. If you own or operate a non-operational stationary RICE that is subject to performance testing, you do not need to start up the engine solely to conduct the performance test. Owners and operators of a non-operational engine can conduct the performance test when the engine is started up again. |
| §63.6620(d) | You must conduct three separate test runs for each performance test required in this section, as specified in §63.7(e)(3). Each test run must last at least 1 hour. |
| §63.6620(e)(1) | <p>You must use Equation 1 of this section to determine compliance with the percent reduction requirement:</p> $\frac{C_i - C_o}{C_i} \times 100 = R \quad (\text{Eq. 1})$ <p>Where:</p> <p>C_i = concentration of CO or formaldehyde at the control device inlet, C_o = concentration of CO or formaldehyde at the control device outlet, and R = percent reduction of CO or formaldehyde emissions.</p> <p>(2) You must normalize the carbon monoxide (CO) or formaldehyde concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen, or an equivalent percent carbon dioxide (CO₂). If pollutant concentrations are to be corrected to 15 percent oxygen and CO₂ concentration is measured in lieu of oxygen concentration measurement, a CO₂ correction factor is needed. Calculate the CO₂ correction factor as described in paragraphs (e)(2)(i) through (iii) of this section.</p> <p>(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, section 5.2, and the following equation:</p> $F_o = \frac{0.209 F_d}{F_c} \quad (\text{Eq. 2})$ <p>Where:</p> <p>F_o = Fuel factor based on the ratio of oxygen volume to the ultimate CO₂ volume produced by the fuel at zero percent excess air.</p> <p>0.209 = Fraction of air that is oxygen, percent/100.</p> <p>F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm³ / J (dscf/10⁶ Btu).</p> <p>F_c = Ratio of the volume of CO₂ produced to the gross calorific value of the fuel from Method 19, dsm³ / J (dscf/10⁶ Btu).</p> <p>(ii) Calculate the CO₂ correction factor for correcting measurement data to 15 percent oxygen, as follows:</p> |

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| | $X_{CO_2} = \frac{5.9}{F_o} \quad (\text{Eq. 3})$ <p>Where:</p> <p>X_{CO_2} = CO₂ correction factor, percent. 5.9 = 20.9 percent O₂ – 15 percent O₂, the defined O₂ correction value, percent.</p> <p>(iii) Calculate the NO_x and SO₂ gas concentrations adjusted to 15 percent O₂ using CO₂ as follows:</p> $C_{adj} = C_d \frac{X_{CO_2}}{\%CO_2} \quad (\text{Eq. 4})$ <p>Where:</p> <p>%CO₂ = Measured CO₂ concentration measured, dry basis, percent.</p> |
| §63.6620(f) | <p>If you comply with the emission limitation to reduce CO and you are not using an oxidation catalyst, if you comply with the emission limitation to reduce formaldehyde and you are not using NSCR, or if you comply with the emission limitation to limit the concentration of formaldehyde in the stationary RICE exhaust and you are not using an oxidation catalyst or NSCR, you must petition the Administrator for operating limitations to be established during the initial performance test and continuously monitored thereafter; or for approval of no operating limitations. You must not conduct the initial performance test until after the petition has been approved by the Administrator.</p> |
| §63.6620(g) | <p>If you petition the Administrator for approval of operating limitations, your petition must include the information described in paragraphs (g)(1) through (5) of this section.</p> <ol style="list-style-type: none"> (1) Identification of the specific parameters you propose to use as operating limitations; (2) A discussion of the relationship between these parameters and HAP emissions, identifying how HAP emissions change with changes in these parameters, and how limitations on these parameters will serve to limit HAP emissions; (3) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations; (4) A discussion identifying the methods you will use to measure and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and (5) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters. |
| §63.6620(h) | <p>If you petition the Administrator for approval of no operating limitations, your petition must include the information described in paragraphs (h)(1) through (7) of this section.</p> <ol style="list-style-type: none"> (1) Identification of the parameters associated with operation of the stationary RICE and any emission control device which could change intentionally (<i>e.g.</i>, operator adjustment, automatic controller adjustment, etc.) or unintentionally (<i>e.g.</i>, wear and tear, error, etc.) on a routine basis or over time; (2) A discussion of the relationship, if any, between changes in the parameters and changes in HAP emissions; (3) For the parameters which could change in such a way as to increase HAP emissions, a discussion of whether establishing limitations on the parameters would serve to limit HAP emissions; (4) For the parameters which could change in such a way as to increase HAP emissions, a discussion of how you could establish upper and/or lower values for the parameters which would establish limits on the parameters in operating limitations; (5) For the parameters, a discussion identifying the methods you could use to measure them and the instruments you could use to monitor them, as well as the relative accuracy and precision of the methods and instruments; |

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

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

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| §63.6625(e) | If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions: |
| §63.6625(e)(2) | An existing emergency or black start stationary RICE with a site rating of less than or equal to 500 HP located at a major source of HAP emissions; |
| §63.6625(e)(3) | An existing emergency or black start stationary RICE located at an area source of HAP emissions; |
| §63.6625(e)(4) | An existing non-emergency, non-black start stationary CI RICE with a site rating less than or equal to 300 HP located at an area source of HAP emissions; |
| §63.6625(e)(7) | An existing non-emergency, non-black start 4SLB stationary RICE with a site rating less than or equal to 500 HP located at an area source of HAP emissions; |
| §63.6625(f) | If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed. |
| §63.6625(h) | If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply. |
| §63.6630(c) | You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.6645. |
| §63.6635(a) | If you must comply with emission and operating limitations, you must monitor and collect data according to this section. |
| §63.6635(b) | Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. |

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| | A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. |
| §63.6635(c) | You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods. |

Notifications, Reports, and Records. §63.6645

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| §63.6645(a) | You must submit all of the notifications in §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h) that apply to you by the dates specified if you own or operate any of the following; |
| §63.6645(a)(1) | An existing stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions. |
| §63.6645(a)(2) | An existing stationary RICE located at an area source of HAP emissions. |
| §63.6645(a)(5) | This requirement does not apply if you own or operate an existing stationary RICE less than 100 HP, an existing stationary emergency RICE, or an existing stationary RICE that is not subject to any numerical emission standards. |
| §63.6645(f) | If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions). |
| §63.6645(g) | If you are required to conduct a performance test, you must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin as required in §63.7(b)(1). |
| §63.6645(h) | If you are required to conduct a performance test or other initial compliance demonstration as specified in Tables 4 and 5 to this subpart, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). (1) For each initial compliance demonstration required in Table 5 to this subpart that does not include a performance test, you must submit the Notification of Compliance Status before the close of business on the 30th day following the completion of the initial compliance demonstration. (2) For each initial compliance demonstration required in Table 5 to this subpart that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th day following the completion of the performance test according to §63.10(d)(2). |
| §63.6650(a) | You must submit each report in Table 7 of this subpart that applies to you. |
| §63.6650(b) | (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 7 of this subpart and according to the requirements in paragraphs (b)(1) through (b)(9) of this section. (1) For semiannual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.6595. (2) For semiannual Compliance reports, the first Compliance report must be postmarked or delivered no later |

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| | <p>than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.6595.</p> <p>(3) For semiannual Compliance reports, each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.</p> <p>(4) For semiannual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.</p> <p>(5) For each stationary RICE that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6 (a)(3)(iii)(A), you may submit the first and subsequent Compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (b)(4) of this section.</p> <p>(6) For annual Compliance reports, the first Compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.6595 and ending on December 31.</p> <p>(7) For annual Compliance reports, the first Compliance report must be postmarked or delivered no later than January 31 following the end of the first calendar year after the compliance date that is specified for your affected source in §63.6595.</p> <p>(8) For annual Compliance reports, each subsequent Compliance report must cover the annual reporting period from January 1 through December 31.</p> <p>(9) For annual Compliance reports, each subsequent Compliance report must be postmarked or delivered no later than January 31.</p> |
| §63.6650(c) | <p>The Compliance report must contain the information in paragraphs (c)(1) through (6) of this section.</p> <p>(1) Company name and address.</p> <p>(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.</p> <p>(3) Date of report and beginning and ending dates of the reporting period.</p> <p>(4) If you had a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.6605(b), including actions taken to correct a malfunction.</p> <p>(5) If there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period.</p> <p>(6) If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period</p> |
| §63.6655(a) | <p>If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.</p> <p>(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).</p> <p>(2) Records of the occurrence and duration of each malfunction of operation (<i>i.e.</i>, process equipment) or the air</p> |

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| | <p>pollution control and monitoring equipment.</p> <p>(3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).</p> <p>(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.</p> <p>(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.</p> |
| §63.6655(f) | <p>If you own or operate any of the stationary RICE in paragraphs (f)(1) or (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response.</p> <p>(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p> <p>(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.</p> |
| §63.6660(a) | Your records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1). |
| §63.6660(b) | As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. |
| §63.6660(c) | You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). |

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Appendix A

PSD Permit Conditions (NSR 4-4-11, SJ 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 EKAPCD-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 EKAPCD, National shall conduct performance tests for NO_x, NO₂, CO, and SO₂ and furnish EKAPCD a written report of results of such tests. Tests for NO_x, CO, and SO₂ shall be conducted on an annual basis at as close as possible to maximum operating capacity of facilities being tested. Upon written request from National, EKAPCD 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, EKAPCD may waive a specified annual test for facility.
2. Performance tests for emissions of NO_x, NO₂, CO, and SO₂ 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_x and NO₂ shall be conducted using EPA Methods 1-4 and 7E.
 - b. Performance tests for emissions of SO₂ 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.

EKAPCD 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 EKAPCD rejection of test results for procedural deficiencies. In lieu of abovementioned test methods, equivalent methods may be used with prior written approval from KCAPCD.

3. For performance test purposes, sampling ports, platforms and access shall be provided by National 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 NO₂ 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% NO₂ to NO_x ratio). Enforcement of this condition shall be based on NO_x, CEM and NO₂ to NO_x 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 NO₂ monitoring data required under the Special Conditions C and H.

If the NO₂ emission limit is revised, the difference between the NO₂ emission limit set forth above and a revised lower NO₂ 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 SO₂ 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 SO₂ monitoring data required under Special Conditions C and H.

If the SO₂ emission limit is revised, the difference between the SO₂ emission limit set forth above and a revised lower SO₂ 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_x, CO and SO₂ 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 NO₂ shall be defined as any 24-hour or 30-day period during which average NO₂ emissions, as measured by CEM, and using most recent measurement of NO₂ to NO_x ratio, exceeds maximum emission limits set forth in Condition X.D. Excess emission of CO and SO₂, 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

Greenhouse Gases:

Carbon dioxide (CO₂),

Nitrous oxide (N₂O),

Methane (CH₄),

Hydrofluorocarbons (HFCs),

Perfluorocarbons (PFCs), and

Sulfur Hexafluoride (SF₆).

Reported for the year 2009

| GHG EMISSIONS (short tons per year) | | | | | | | |
|--|-----------------|-----------------|------------------|------|------|-----------------|-----------|
| Pollutants: | CO ₂ | CH ₄ | N ₂ O | HFCs | PFCs | SF ₆ | Total |
| Emissions (tpy): | 417,936 | 4.3 | 0.8 | N/A | N/A | N/A | |
| *GWP: | 1 | 21 | 310 | ** | ** | 23,900 | |
| CO ₂ e (tpy): | 417,936 | 90.3 | 248 | N/A | N/A | N/A | 418,274.3 |

*Global Warming Potential (GWP): The capacity to heat the atmosphere, calculated as the ratio of the time-integrated radiative forcing from the instantaneous release of 1 kilogram (kg) of a substance relative to that of 1 kg of CO₂. GWP shall be calculated according to the factors for a 100-year time horizon, as stated in 40 CFR Part 98 Subpart A Table A-1 (Global Warming Potentials).

** GWP varies based on each pollutant.