JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

TITLE V OPERATING PERMIT

Permittee:	**HM Southeast Cement, LLC. (FKA Lehigh Hanson Cement South, LLC.)**
Location:	**8401 Second Avenue Leeds, Alabama 35094**
Permit No:	**4-07-0290-08**
Issuance Date:	**December 10, 2025**
Expiration Date:	**December 9, 2030**
Nature of Business:	**Portland Cement Manufacturing**

Emissions Unit No.	Emissions Unit Description
001 & 002	Limestone Quarry
003, 004, & 034	Kiln Feed Storage and Handling
005	Preheater Rotary Kiln with Loesche Mill
006	Clinker Cooler
007, 008, 009, 010, 013, & 063	Clinker Handling
011, 012 & 014	No. 5, No. 6, & No. 7 Clinker Finish Grinding Ball Mills
015, 016 & 017	Rotary Packing Machine and Cement Transfer System
018, 019, 022 & 023	"B" Silo Storage and Loadout
020, 021, 024, 025, 026, 027, 028, 029, 030 & 031	"C" Silo Storage and Loadout
051, 061, 052, 053, 054, 055, 056, 057, 058, 059 & 060	"D" Silo Storage and Loadout
062 & 064	Emergency Generators

This Permit is issued pursuant to and is conditioned upon the compliance with the provisions of the Jefferson County Board of Health Air Pollution Control Rules and Regulations, the applicable requirements of the Clean Air Act implementation plan for Alabama approved or promulgated by the United States Environmental Protection Agency (EPA) through rulemaking under title I of the Clean Air Act (identified in 40 CFR 52, Subpart B) and other applicable requirements as defined in section 18.1.1(e) of the Jefferson County Board of Health Rules and Regulations, Section 18 of the Alabama Air Pollution Control Act of 1971, Act No. 769 (Regular Session, 1971), Section 22-28-16 of the Alabama Air Pollution Control Act as amended, Orders of the Jefferson County Board of Health, Orders of the Director of the Alabama Department of Environmental Management (ADEM), and any applicable local, state or federal Court Order. This Permit is subject to the accuracy of all information submitted relating to the permit application and to the conditions appended hereto. It is valid from the date of issuance until the expiration date and shall be posted or kept under file at the source location described above and shall be made readily available for inspection at any reasonable time to any and all persons who may request to see it. This Permit is not transferable.

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Pursuant to the Clean Air Act, conditions of this permit are federally enforceable by EPA, The Jefferson County Board of Health, ADEM and citizens in general. However, provisions that are not required by the Clean Air Act or under any of its applicable requirements, are considered to be Jefferson County provisions and are not federally enforceable by EPA and citizens in general. Those provisions are contained in separate Sections of this Operating Permit and are specifically identified as not being federally enforceable.

Jonathan Stanton, Director
Environmental Health Services

Approved: David Hicks, DO, MPH, FAAFP
Health Officer

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In addition to compliance with Alabama Air Pollution Control Act Number 769 (Regular Session, 1971) and Act Number 612 (Regular Session, 1982) and with all applicable Air Pollution Control Rules and Regulations, the conditions which are listed below are hereby contained in and made a part of this permit. For each citation to a Jefferson County Board of Health regulation provided in connection with a permit condition (other than for those permit conditions that are specifically identified in the permit as not being federally enforceable), Appendix A to this permit identifies the corresponding ADEM regulation that has been approved by EPA as part of the Clean Air Act implementation plan for Alabama (identified in 40 CFR 52, Subpart B). The corresponding ADEM regulations, together with the cited Jefferson County Board of Health regulations, serve as the origin and authority for the associated permit term or condition.

General Permit Conditions

No.	Federally Enforceable General Permit Conditions	Regulations
	Definitions	
1.	For the purposes of this Major Source Operating Permit, the following terms will have the meanings ascribed to in this permit: "12-Month Rolling Total" shall mean the total of monthly emissions calculations summed for a consecutive 12-month period and then compared to an annual emission or throughput limit to determine compliance. "30-Day Rolling Average Emission Limit" shall mean, for the purposes of Consent Decree 5:19-cv-05688, with respect to any kiln at the facility, the maximum allowable rate of emission of a specified air pollutant from such kiln(s), as applicable, and shall be expressed as pounds of such air pollutant emitted per ton of clinker produced. Compliance with the 30-day rolling average emission limit shall be determined by calculating the 30-day rolling average emission rate and comparing that with the 30-day rolling average emission limit. *Consent Decree 5:19-cv-05688* "30-Day Rolling Average Emission Rate" shall mean, for the purposes of Consent Decree 5:19-cv-05688, with respect to each kiln at the facility, the rate of emission of NO_x or SO_2, respectively, expressed as pounds per ton of clinker produced at such kiln and calculated in accordance with the following procedure: 1. Sum the total pounds of the pollutant in question emitted from the kiln during an operating day and the previous twenty-nine (29) operating days, as measured pursuant to Section V.B (NOx Continuous Emission Monitoring Systems) and Section VI.C (SO2 Continuous Emission Monitoring Systems) of Consent Decree 5:19-cv-05688. 2. Sum the total tons of clinker produced by the kiln during the same operating day and previous twenty-nine (29) operating days. 3. Divide the total number of pounds of that pollutant emitted from the kiln in question during the thirty (30) operating days referred to above by the total tons of clinker produced at such kiln during the same thirty (30) operating days. 4. A new 30-day rolling average emission rate shall be calculated for each new operating day. Only emission data determined to be valid under 40 C.F.R. §60.13 or substituted data in accordance with Paragraphs 19 and 28 of Consent Decree 5:19-cv-05688 shall be included. 5. In calculating each 30-day rolling average emission rate, the total pounds of that pollutant emitted from a kiln during a specified period (operating day or 30-day period) shall include all emissions of that pollutant from the subject kiln that occur during the specified period, including emissions during each malfunction. *Consent Decree 5:19-cv-05688* "40 CFR 51" is an acronym for Part 51 of Title 40 of the Code of Federal Regulations. "40 CFR 52" is an acronym for Part 52 of Title 40 of the Code of Federal Regulations. "40 CFR 59" is an acronym for Part 59 of Title 40 of the Code of Federal Regulations.	1.3 8.26.1 8.27.1 18.7.1 60.2 63.1 63.1341 63.6675 64.1 241.2 Consent Decree 5:19-cv-05688

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	"40 CFR 60" is an acronym for Part 60 of Title 40 of the Code of Federal Regulations. "40 CFR 61" is an acronym for Part 61 of Title 40 of the Code of Federal Regulations. "40 CFR 63" is an acronym for Part 63 of Title 40 of the Code of Federal Regulations. "40 CFR 64" is an acronym for Part 64 of Title 40 of the Code of Federal Regulations. "40 CFR 68" is an acronym for Part 68 of Title 40 of the Code of Federal Regulations. "40 CFR 82" is an acronym for Part 82 of Title 40 of the Code of Federal Regulations. "40 CFR 98" is an acronym for Part 98 of Title 40 of the Code of Federal Regulations. "Act" means the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. "ADEM" means the Alabama Department of Environmental Management. "Air Permit" shall mean any permit issued pursuant to Chapter 2 of the Rules and Regulations. "APCD" means air pollution control device. "Air Pollution Emergency" shall mean a situation in which metrological conditions and/or contaminant levels in the ambient air reach or exceed the levels which may cause imminent and substantial endangerment to health. "Annual Rolling Total" shall be an equivalent phrase for "12-Month Rolling Total." "Business Day" means any day, except for Saturday, Sunday, and federal holidays. *Consent Decree 5:19-cv-05688* "CAM" is an acronym for compliance assurance monitoring. "CD Emissions Reductions" shall mean any emissions reductions that results from any projects, controls, or any other actions utilized to comply with Consent Decree 5:19-cv-05688. *Consent Decree 5:19-cv-05688* "Capture system" means the equipment (including hoods, ducts, fans, etc.) used to contain, capture or transport a pollutant to a control device or an exhaust system. "Carbon dioxide equivalent or CO_2e" means the number of metric tons of CO_2 emissions with the same global warming potential as one metric ton of another greenhouse gas, and is calculated using Equation A-1 of 40 CFR 98. "CEMS" or "Continuous Emissions Monitoring System" shall mean, for obligations involving NO_x and SO_2 under Consent Decree 5:19-cv-05688, the total equipment and software required to sample and condition (if applicable), to analyze, and to provide a record of NO_x and SO_2 emission rates, and the raw data necessary to support the reported emission rates, and that have been installed and calibrated in accordance with 40 C.F.R. §60.13 and 40 C.F.R. Part 60 Appendix B and Appendix F. *Consent Decree 5:19-cv-05688* "CKD" is an acronym for clinker kiln dust. "Clean cellulosic biomass" means those residuals that are akin to traditional cellulosic biomass, including, but not limited to: Agricultural and forest-derived biomass (e.g., green wood, forest thinnings, clean and unadulterated bark, sawdust, trim, tree harvesting residuals from logging and sawmill materials, hogged fuel, wood pellets, untreated wood pallets); urban wood (e.g., tree trimmings, stumps, and related forest-derived biomass from urban settings); corn stover and other biomass crops used specifically for the production of cellulosic biofuels (e.g., energy cane, other fast growing grasses, byproducts of ethanol natural fermentation processes); bagasse and other crop residues (e.g., peanut shells, vines, orchard trees, hulls, seeds, spent grains,	

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	cotton byproducts, corn and peanut production residues, rice milling and grain elevator operation residues); wood collected from forest fire clearance activities, trees and clean wood found in disaster debris, clean biomass from land clearing operations, and clean construction and demolition wood. These fuels are not secondary materials or solid wastes unless discarded. Clean biomass is biomass that does not contain contaminants at concentrations not normally associated with virgin biomass materials. *40 CFR 241, Solid Wastes Used as Fuels or Ingredients in Combustion Units* "Clinker" means the product of the process in which limestone and other materials are heated in the kiln and is then ground with gypsum and other materials to form cement. *40 CFR 63, Subpart LLL* "Clinker cooler" means equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system. *40 CFR 63, Subpart LLL* "CMS" is an acronym for continuous monitoring system. "CO" is an acronym for carbon monoxide. "COMS" is an acronym for continuous opacity monitoring system. "Combustion Control" is the method used to maintain NOx emissions below a prescribed limitation through management of combustion parameters at the kiln. *Consent Decree 5:19-cv-05688* "Commence" or "Commencement" of operation of a control technology shall mean, for the purposes of Consent Decree 5:19-cv-05688, to begin the introduction of the reagent employed by the control technology, as applicable to that technology, or when the technology is otherwise activated. *Consent Decree 5:19-cv-05688* "Continuous monitor" means a device which continuously samples the regulated parameter specified in §63.1350 without interruption, evaluates the detector response at least once every 15 seconds, and computes and records the average value at least every 60 seconds, except during allowable periods of calibration and except as defined otherwise by the continuous emission monitoring system performance specifications in appendix B to 40 CFR 60. *40 CFR 63, Subpart LLL* "Continuous opacity monitoring system (COMS)" means a continuous monitoring system that measures the opacity of emissions. *40 CFR 63, Subpart A* "Conveying system" means a device for transporting materials from one piece of equipment or location to another location within a facility. Conveying systems include but are not limited to the following: feeders, belt conveyors, bucket elevators and pneumatic systems. *40 CFR 63, Subpart LLL* "Continuously Operate" or "Continuous Operation", for the purposes of Consent Decree 5:19-cv-05688, shall mean, except as provided below, that when a control technology is installed at a kiln, it shall be operated at all times of kiln operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for such Control Technology and the Kiln, except during: 1. Malfunction of the control technology; 2. Periods where the kiln is operating below the minimum temperature required for operation of the control technology, as specified in writing by the manufacturer or installation contractor (to include the permittee when it serves as manufacturer, installer or designer of the control technology);or 3. For selective non-catalytic reduction system operation, detached plume events; provided, however, wherever a control technology involves the injection or	

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	addition of reagent, then the reagent shall be injected or added as necessary to achieve the emissions limits referenced in Table 2 and Table 3 of Consent Decree 5:19-cv-05688. *Consent Decree 5:19-cv-05688* "Control Technology" shall mean those technologies specified in Sections V and VI of Consent Decree 5:19-cv-05688, which may include a Selective Non-Catalytic Reduction System; Wet or Dry Scrubbers; Combustion Controls; Kiln Inherent Scrubbing (including scrubbing in the inline raw mill); or a Lime Injection System. *Consent Decree 5:19-cv-05688* "Conveying system transfer point" means a point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system. *40 CFR 63, Subpart LLL* "CPMS" is an acronym for continuous parametric monitoring system. "Crusher" means a machine designed to reduce large rocks from the quarry into materials approximately the size of gravel. *40 CFR 63, Subpart LLL* "Day" or "calendar day" means a 24-hour period beginning at midnight, unless, for the purposes of Consent Decree 5:19-cv-05688, it is expressly stated to be a business day. "Department" means the Jefferson County Department of Health. "Deviation" means any instance in which the permittee fails to meet any requirement or obligation established by regulation, including but not limited to any emission limitation, operating limit, work practice standard, or any permit term or condition, or fails to meet any term or condition adopted to implement an applicable requirement, including but not limited to emission limitations during periods of startup, shutdown or malfunction. "Dioxins and furans (D/F)" means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans. *40 CFR 63, Subpart LLL* "Effective Date" shall mean, for the purposes of Consent Decree 5:19-cv-05688, November 18, 2020. *Consent Decree 5:19-cv-05688* "Emission limitation or standard" means any applicable requirement that constitutes an emission limitation, emission standard, standard of performance or means of emission limitation as defined under the Act. 1. An emission limitation or standard may be expressed in terms of the pollutant, expressed either as a specific quantity, rate or concentration of emissions (e.g., pounds of SO_2 per hour, pounds of SO_2 per million British thermal units of fuel input, kilograms of VOC per liter of applied coating solids, or parts per million by volume of SO_2) or as the relationship of uncontrolled to controlled emissions (e.g., percentage capture and destruction efficiency of VOC or percentage reduction of SO_2). 2. An emission limitation or standard may also be expressed either as a work practice, process or control device parameter, or other form of specific design, equipment, operational, or operation and maintenance requirement. 3. For purposes of 40 CFR 64, an emission limitation or standard shall not include general operation requirements that an owner or operator may be required to meet, such as requirements to obtain a permit, to operate and maintain sources in accordance with good air pollution control practices, to develop and maintain a malfunction abatement plan, to keep records, submit reports, or conduct monitoring. *40 CFR §64.1* "Emission Limit" or "Emission Limits" shall mean, for the purposes of Consent Decree 5:19-cv-05688, shall mean the maximum allowable rate of emission of a specified air	

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	pollutant from a kiln as specified in Paragraph 12, Table 2 (NO_x) and Paragraph 20, Table 3 (SO_2) of Consent Decree 5:19-cv-05688. *Consent Decree 5:19-cv-05688* “Emissions unit” means any part or activity of a stationary source that emits or has the potential to emit any regulated air pollutant or any pollutant listed under §112(b) of the Act. “EPA” means the U.S. Environmental Protection Agency. “Exceedance” shall mean a condition that is detected by monitoring that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) are greater than the applicable emission limitation or standard (or less than the applicable standard in the case of a percent reduction requirement) consistent with any averaging period specified for averaging the results of the monitoring. “Finish mill” means a roll crusher, ball and tube mill or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill. *40 CFR 63, Subpart LLL* "Fuel-Burning Equipment" shall mean any equipment, device or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, used primarily, but not exclusively, to burn any type fuel for the purpose of indirect heating in which the material being heated is not contacted by and adds no substance to the products of combustion. *1.3* "Fugitive Dust" shall mean solid air-borne particulate matter emitted from any source other than a flue or stack. *1.3* “Fugitive emissions” means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under §112 of the Clean Air Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source. *40 CFR 63, Subpart A* “GHG” is an acronym for greenhouse gas. “HAP” is an acronym for Hazardous Air Pollutant. “Hazardous Air Pollutant” means any of the substances listed in Appendix D of the Rules and Regulations or §112(b) of the Clean Air Act. *40 CFR 63, Subpart A* “In-line coal mill” means a coal mill using kiln exhaust gases in their process. A coal mill with a heat source other than the kiln or a coal mill using exhaust gases from the clinker cooler is not an in-line coal mill. *40 CFR 63, Subpart LLL* “Kiln” means a device, including any associated preheater or precalciner devices, inline raw mills, inline coal mills or alkali bypasses that produces clinker by heating limestone and other materials for subsequent production of Portland cement. Because the inline raw mill and inline coal mill are considered an integral part of the kiln, for purposes of determining the appropriate emissions limit, the term kiln also applies to the exhaust of the inline raw mill and the inline coal mill. *40 CFR 63, Subpart LLL* “Kiln Operation” shall mean any period when any raw materials are fed into the Kiln or any combustion is occurring in the Kiln or Calciner burners. *Consent Decree 5:19-cv-05688* “Lime Injection” or “Lime Injection System” shall mean a pollution control system that injects lime or another reagent that has been demonstrated as effective in reducing SO_2 emissions into the gas stream for the purpose of reducing SO_2 emissions (including but not limited to, Hydrated Lime ($Ca(OH)_2$), Soda Ash - Sodium Carbonate (Na_2CO_3),	

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	Sodium Bicarbonate (NaHCO3), and Trona – Trisodium hydrogen dicarbonate dihydrate ($Na_2CO_3 \cdot NaHCO_3 \cdot 2H_2O$)). *Consent Decree 5:19-cv-05688* "Malfunction" means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions. For the purposes of the Consent Decree, malfunction shall have the same meaning as defined at §60.2. *40 CFR 63, Subpart A, Consent Decree 5:19-cv-05688* "Modification" shall mean any physical change in, or change in the method of operation of, an affected source which increases the amount of any air contaminant (to which a rule or regulation applies) emitted by such source or which results in the emission of any air contaminant (to which a rule or regulation applies) not previously emitted, except that routine maintenance, repair, and replacement shall not be considered physical changes and the following shall not be considered a change in the method of operation: an increase in the production rate, an increase in hours of operation, or use of an alternate fuel or raw material. "Monitoring" means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements: 1. Indicator(s) of performance—the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. a. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. b. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables. 2. Measurement techniques—the means by which you gather and record information of or about the indicators of performance. a. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. b. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices. 3. Monitoring frequency—the number of times you obtain and record monitoring data over a specified time interval. a. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.	

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	4. Averaging time—the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. a. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm. *40 CFR 63, Subpart A* "NAAQS" is an acronym for "National Ambient Air Quality Standards." "NESHAP" is an acronym for "National Emission Standards for Hazardous Air Pollutants." "New Source Review" (NSR) permitting means a system of evaluating the impact of any significant modification made at a major source and establishing permitting conditions to prevent the modification from causing or contributing to a violation of the NAAQS or consuming more than the allowed increment. These permitting provisions are located in Parts 2.4 and 2.5 of the Rules and Regulations. "NO_X" is an acronym for nitrogen oxides. "NSPS" is any acronym for "New Source Performance Standards." "Opacity" shall mean the degree to which emissions reduce the transmission of light and obscure the view of the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium. *40 CFR 63, Subpart A* "Open clinker storage pile" means a clinker storage pile on the ground for more than three days that is not completely enclosed in a building or structure. *40 CFR 63, Subpart LLL* "Operating day" means, for the purposes of 40 CFR 63, Subpart LLL, any 24-hour period beginning at 12:00 midnight during which the kiln produces any amount of clinker. For calculating the 30-day rolling average emissions, kiln operating days do not include the hours of operation during startup or shutdown. *40 CFR 63, Subpart LLL* "Operating day" shall mean, for the purposes of Consent Decree 5:19-cv-05688, any day on which kiln operation has occurred. *Consent Decree 5:19-cv-05688* "Operating Permit" shall mean any permit issued pursuant to Chapter 18 of the Rules and Regulations. "Permittee" means the holder of an operating permit issued by the Department. "Performance audit" means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality. *40 CFR 63, Subpart A* "Performance evaluation" means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data. *40 CFR 63, Subpart A* "Performance test" means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard. *40 CFR 63, Subpart A* "PM" is an acronym for particulate matter. "PM_{10}" is an acronym for particulate matter of less than 10 microns. "$PM_{2.5}$" is an acronym for particulate matter of less than 2.5 microns.	

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	"Process" shall mean any action, operation, or treatment of materials, including handling and storage thereof, which may cause discharge of an air contaminant, or contaminants, into the atmosphere, but excluding fuel burning and refuse burning. "Process Weight" shall mean the total weight in pounds of all materials introduced into any specific process which may cause any discharge into the atmosphere. "Process Weight per Hour" shall mean the total weight of all materials introduced into any specific process that may cause any discharge of particulate matter. Solid fuels charged will be considered as part of the process weight, but liquid and gaseous fuels and combustion air will not. For a cyclic or batch operation, the process weight per hour will be derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour will be derived by dividing the process weight for a typical period of time by that time period. “PSD” is an acronym for “Prevention of Significant Deterioration” permitting under Chapter 2.4 of the Rules and Regulations. “RATA” is an acronym for relative accuracy test audit. “Raw material dryer” means an impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed or other materials. *40 CFR 63, Subpart LLL* “Raw mill” means a ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill. *40 CFR 63, Subpart LLL* “Responsible official” means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and the delegation of authority to such representatives is approved in advance by the Department. “Retire” or “Retirement” shall mean, with respect to any kiln, to permanently shut down the kiln and to file an application in accordance with the Department to remove permanently any legal authorization for further operation of the kiln. *Consent Decree 5:19-cv-05688* “RICE” is an acronym for reciprocating internal combustion engine. “Rolling average” means the weighted average of all data, meeting QA/QC requirements or otherwise normalized, collected during the applicable averaging period. The period of a rolling average stipulates the frequency of data averaging and reporting. 1. To demonstrate compliance with an operating parameter a 30-day rolling average period requires calculation of a new average value each operating day and shall include the average of all the hourly averages of the specific operating parameter.	

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	2. For demonstration of compliance with an emissions limit based on pollutant concentration a 30-day rolling average is comprised of the average of all the hourly average concentrations over the previous 30 operating days. 3. For demonstration of compliance with an emissions limit based on lbs-pollutant per production unit the 30-day rolling average is calculated by summing the hourly mass emissions over the previous 30 operating days, then dividing that sum by the total production during the same period. *40 CFR 63, Subpart LLL* "Rules and Regulations" means the Jefferson County Board of Health Air Pollution Control Rules and Regulations. "Run" means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in 40 CFR 63. "Run average" means the average of the recorded parameter values for a run. *40 CFR 63, Subpart LLL* "Shutdown" means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases. *40 CFR 63, Subpart LLL* "SIP" is an acronym for "State Implementation Plan" pursuant to 40 CFR 52. "Six-Minute Average" shall be determined by calculating the arithmetic mean of twenty-four (24) consecutive opacity observations, taken at intervals of fifteen (15) seconds. "Selective Non-Catalytic Reduction" or "SNCR" shall mean a pollution control system that injects ammonia, monomethylamine, cyanuric acid, and/or urea into the gas stream without the use of a catalyst for the purpose of reducing NOx emissions. *Consent Decree 5:19-cv-05688* "SO_2" is an acronym for sulfur dioxide. "Sorbent" means activated carbon, lime, or any other type of material injected into kiln exhaust for the purposes of capturing and removing any hazardous air pollutant. *40 CFR 63, Subpart LLL* "Source" means any building, structure, facility, installation, article, machine, equipment, device, or other contrivance which emits or may emit any air contaminant. Any activity which utilizes abrasives or chemicals for cleaning or any other purpose (such as cleaning the exterior of buildings) which emits air contaminants shall be considered a source. *1.3* "Standard conditions" means a temperature of 293 K (68 °F) and a pressure of 101.3 kilopascals (29.92 in. Hg). *40 CFR 63, Subpart A, 1.3* "Startup" means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first. *40 CFR 63, Subpart LLL* "Stationary Source" means any building, structure, facility or installation that emits or may emit any regulated pollutant as defined in Part 18.1 of the Rules and Regulations or any pollutant listed in Appendix D of the Rules and Regulations. "Stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant which has been designated as hazardous by the Administrator. *CFR 63, Subpart A*	

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	"Temporary Cessation," "Temporary Cessation of Kiln Operation" or "Temporarily Cease Kiln Operation," except for planned and/or maintenance or repair outages at plants, shall mean the period when a kiln is not in a state of kiln operation and the permittee has provided the required notice pursuant to Paragraph 37 of Section VIII (Temporary Cessation of Kiln Operation) of Consent Decree 5:19-cv-05688. *Consent Decree 5:19-cv-05688* "TEQ" means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989. The 1989 Toxic Equivalency Factors (TEFs) used to determine the dioxin and furan TEQs are listed in Table 2 to subpart LLL of Part 63. *40 CFR 63, Subpart LLL* "Total organic HAP" means, for the purposes of 40 CFR 63, Subpart LLL, the sum of the concentrations of compounds of formaldehyde, benzene, toluene, styrene, m-xylene, p-xylene, o-xylene, acetaldehyde, and naphthalene as measured by EPA Test Method 320 or Method 18 of appendix A to this part or ASTM D6348-031 or a combination of these methods, as appropriate. 1. If measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), you must use the method detection level as the measured emissions level for that pollutant in calculating the total organic HAP value. 2. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 18 fractions) may include a combination of method detection level data and analytical data reported above the method detection level. 3. The owner or operator of an affected source may request the use of other test methods to make this determination under paragraphs 63.7(e)(2)(ii) and (f). 4. When using ASTM D6348-03, the following conditions must be met: a. The test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory; b. For ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be determined for each target analyte (see Equation A5.5); c. For the ASTM D6348-03 test data to be acceptable for a target analyte percent R must be 70 percent ≥R ≤130 percent; and d. The percent R value for each compound must be reported in the test report and all field measurements corrected with the calculated percent R value for that compound using the following equation: Reported Result = The measured concentration in the stack divided by the calculated percent R value and then the whole term multiplied by 100. *40 CFR 63, Subpart LLL* "Totally enclosed conveying system transfer point" means a conveying system transfer point that is enclosed on all sides, top, and bottom. *40 CFR 63, Subpart LLL* "Visible emission" means the observation of an emission of opacity or optical density above the threshold of vision. *40 CFR 63, Subpart A* "VOC" is an acronym for volatile organic compound. "Volatile Organic Compound" means any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions. This	

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	includes any such organic compound other than those listed under Part 1.3 of the Rules and Regulations and/or under 40 CFR §51.100(s)(1). In addition, the individual definitions as specified in each applicable rule, regulation, or standard shall be utilized where applicable.	
	General Conditions	
2.	**Basis for Permit** This Operating Permit is issued based on provisions contained in all existing Jefferson County Board of Health Air Pollution Control Rules and Regulations (hereinafter called Rules and Regulations in this permit). In the event amendments, revisions or additions are made to these Rules and Regulations, it shall be the responsibility of the permit holder (hereinafter called the permittee in this permit) to comply with such new Rules and Regulations. Additions and revisions to the conditions in this Operating Permit will be made by the Jefferson County Department of Health (hereinafter called the Department), if necessary, to assure that the Rules and Regulations are not violated.	AL Act 612 AL Act 769
3.	**Authority** Nothing in this Operating Permit or conditions appended thereto shall negate any authority granted to this Department or the Health Officer pursuant to Alabama Air Pollution Control Act No. 769 (Regular Session, 1971) and Act No. 612 (Regular Session, 1982) or any regulations promulgated thereunder.	AL Act 612 AL Act 769
4.	**Acceptance of Permit** The permittee is required to bring the operation of a source within the standards of Paragraph 18.2.8(a) of the Rules and Regulations. Commencing construction or operation of the source shall be deemed acceptance of all conditions specified. A Title V Operating Permit with revised conditions may be issued upon receipt of a new application if the permittee demonstrates that the source can operate within the standard of Paragraph 18.2.8(a) of the Rules and Regulations under the revised conditions.	18.2.4
5.	**Compliance With Existing and Future Regulations** A. The permittee shall comply with all conditions of the Rules and Regulations. B. The permittee shall continue to comply with the applicable requirements with which the company has certified that it is already in compliance. C. The permittee shall comply in a timely manner with applicable requirements that become effective during the term of this permit, and shall follow any more detailed schedule of compliance set forth in the applicable requirement or unit specific permit requirements. D. The permittee shall be subject to any future MACT standards from the effective date as published by EPA and shall comply with the rule by the compliance date.	18.5.6 18.4.8(h) 18.7.3 18.7.6
6.	**Noncompliance** The permittee shall comply with all terms and conditions of the permit. Noncompliance with any term or condition of a permit will constitute a violation of the Act and the Rules and Regulations and may result in enforcement action; including but not limited to, permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.	70.6(a)(6)(i) 18.5.6
7.	**Compliance Defense** The permittee shall not use as a defense in an enforcement action, that maintaining compliance with permit conditions would have required halting or reducing the permitted activity.	18.5.7
8.	**Credible Evidence** Any credible evidence or information relevant to whether a source may have been in compliance with applicable requirements can be used to establish whether or a not an owner or operator has violated or is in violation of any rule or standard in the Rules and Regulations and/or any applicable provisions of 40 CFR 60 or 40 CFR 61.	1.18 60.11(g) 61.12(e)

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9.	**Circumvention** No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes any emission of air contaminants which would otherwise violate the Rules and Regulations.	1.15 60.12 61.19 63.4(b)
10.	**Bypass of Control Equipment Prohibited** Except as otherwise provided in this permit, the permittee shall not bypass, without prior approval from this Department, any air pollution control device. The permittee shall not shut down any air pollution control device unless such shutdown is accompanied by the corresponding shutdown of the respective source which the device is intended to control.	18.2.4
11.	**Shutdown of Control Equipment** In the case of shutdown of air pollution control equipment for scheduled maintenance, the intent shall be reported to this Department at least 24 hours prior to the planned shutdown unless the scheduled shutdown is accompanied with the shutdown of the source being controlled. The report shall contain the information listed in Section 1.12.1.	1.12.1
12.	**Maintenance of Controls** A. The permittee shall equip each fabric filter particulate matter control device with a pressure differential measuring device to measure the pressure drop across the filter media in the control device. The device shall be installed in a location which is easily accessible for inspection by Department personnel. B. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in accordance with the manufacturer's specifications or alternative procedures approved by the Department so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be maintained near the source and provided to the Department upon request. C. The permittee shall conduct routine inspections on all required control equipment. All inspection results and repair work performed on the pollution control device shall be recorded. These records shall be kept in a permanent form suitable for inspection.	18.2.4 18.5.3(a)(2)
13.	**Nothing in this Operating Permit shall alter or affect the following:** A. The provisions of §303 of the Act (emergency orders), including the authority of the Administrator under that section; B. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; C. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or D. The ability of EPA to obtain information from a source pursuant to §114 of the Act.	18.10.3
14.	**Additional Information and Corrected Information** The permittee shall submit any additional information to the Department to supplement or correct an application promptly after becoming aware of the need for additional or corrected information. Also, the permittee shall submit additional information concerning any new requirements which have become applicable after a complete application has been filed but before a draft permit is released. Any change in the information already provided pursuant to 40 CFR 63 shall be provided in writing within 15 calendar days after the change.	18.4.7 63.9(j)
15.	**Display and Availability of Permit** The permittee shall keep this Operating Permit under file or on display at all times at the site where the source is located and shall make the permit available for inspection by any and all persons who may request to see it.	18.2.2

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16.	**Payment of Fees** The permittee must have paid all fees required by the Rules and Regulations or the Operating Permit is not valid. Payment of operating permit fees required under Chapter 16 of the Rules and Regulations shall be made on or before the date specified under Section 16.5.1 of the Rules and Regulations of each year. Failure to make payment of fees within 30 days of the specified date shall cause the assessment of a late fee of 3% (of the original fee) per month or fraction thereof.	18.5.11 16.1 16.4 16.5
17.	**Transfer** This permit is not transferable, whether by operation of law or otherwise, either from one location to another, from one piece of equipment to another or from one person to another except as provided in Subparagraph 18.13.1(a)(5) of the Rules and Regulations.	18.2.6
18.	**New Air Pollution Sources and Changes to Existing Units** A new permit application must be made for new sources, replacements, alterations or design changes which may result in the issuance of, or an increase in the issuance of, air contaminants, or the use of which may eliminate or reduce or control the issuance of air contaminants. For any new source or modification of an existing source subject to 40 CFR 63, the permittee shall submit an application as required by 63.5.	1.5.15 60.7(a)(4) 63.5
19.	**Construction Not In Accordance with Applications** If the source permitted herein has not been constructed in accordance with the Operating Permit application and if the changes noted are of a substantial nature in that the amount of air contaminants emitted by the source may be increased or in that the effect is unknown, then the Operating Permit shall be revoked. No further application for an Operating Permit shall be accepted until the source has been reconstructed in accordance with the Operating Permit or until the permittee has proven to the Department that the change will not cause an increase in the emission of air contaminants.	18.2.8(e)
20.	**Expiration** A source's right to operate shall terminate upon the expiration of this Operating Permit unless a timely complete renewal application has been submitted at least 6 months, but not more than 18 months before the date of expiration or the Department has taken final action approving the source's application for renewal by the expiration date. The expiration date of this Operating Permit is printed on the first page of this permit.	18.4.3 18.5.2 18.12.2(b)
21.	**Revocation** This Operating Permit may be revoked for any of the following reasons: A. Failure to comply with any conditions of the permit; B. Failure to establish and maintain such records, make such reports, install, use and maintain such monitoring equipment or methods; and sample such emissions in accordance with such methods at such locations, intervals and procedures as may be prescribed in accordance with Section 1.9.2 of the Rules and Regulations; C. Failure to comply with any provisions of any Department administrative order issued concerning the permitted facility; D. Failure to allow entry and inspections by properly identified Department personnel; E. Failure to comply with the Rules and Regulations; or F. For any other cause, after a hearing which establishes, in the judgment of the Department, that continuance of the permit is not consistent with the purpose of the Act or Rules and Regulations.	18.2.9
22.	**Severability** In case of legal challenge to any portion of this Operating Permit, the remainder of the permit conditions shall continue in force.	18.5.5
23.	**Reopening for Cause** Under any of the following circumstances, this Operating Permit will be reopened and revised prior to the expiration of the permit:	18.13.5

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	A. Additional applicable requirements under the Clean Air Act become applicable to the permittee with a remaining permit term of 3 or more years. Such a reopening shall be completed no later than 18 months after promulgation of the applicable requirements. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire. B. Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into this permit. C. The Department, ADEM or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. D. The Administrator, ADEM or the Department determines that this permit must be revised or revoked to assure compliance with the applicable requirements.	
24.	**Changes or Termination for Cause – No Stay of Permit Conditions** This permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance or termination, or of a notification of a planned change or anticipated noncompliance will not stay any permit condition.	18.5.8
25.	**Requests for Information** The permittee shall furnish to the Department within 30 days, or for such other reasonable time as the Department may set, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance. Upon receiving a specific request, the permittee shall also furnish to the Department copies of records required to be kept by the permit. For information claimed to be confidential, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.	18.5.10 70.6(a)(6)(v)
26.	**Entry and Inspections** The permittee shall allow the Department, ADEM, EPA or authorized representative, upon presentation of credentials and other documents that may be required by law, to conduct the following: A. Enter upon the permittee's premises where a source is located or emissions related activity is conducted or where records are kept pursuant to the permit conditions; B. Review and/or copy at reasonable times any records kept pursuant to the permit conditions; C. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices or operations required by the permit; and D. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements. Denial of access upon proper identification is grounds for permit revocation.	1.8 18.7.2 18.2.9(d)
27.	**Flexibility Changes** Certain changes (per §502 (b)(10) of the Act) can be made to this Operating Permit without a revision if no modification as defined in the Rules and Regulations would occur and the changes do not exceed the emissions allowed under this permit provided that written notification is sent to the Department and EPA at least 7 days before the change is made. The written notification shall describe the proposed change, the date of the change, any change in emissions, and any term or condition of the permit which is no longer valid due to the change.	18.13.2
28.	**Minor Permit Modifications** Minor permit modification procedures may be used only for those permit modifications that: A. Do not violate any applicable requirement;	18.13.3

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	B. Do not involve significant changes to existing monitoring, reporting, or record keeping requirements in the permit; C. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis; D. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include: 1. A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Act; and 2. An alternative emissions limit approved pursuant to regulations promulgated under §112(i)(5) of the Act; E. Are not modifications under any provision of title I of the Act; and F. Are not required by Part 18.12 of this Chapter to be processed as a significant modification. An application requesting the use of minor permit modification procedures shall meet the requirements of Section 18.4.8 relative to the modification and shall include the information listed at Paragraph 18.13.3(b). If the Department notifies the source that the modification does not qualify as a minor modification within 10 days after receiving the application, then the source shall apply for the change as a significant modification. Ten days after the application has been submitted to the Department, the source may make the change for which they applied unless the change does not qualify as a minor modification. After the source makes the change and until the Department takes final action on the permit application, the source must comply with both the applicable requirements governing the change and the proposed permit terms and conditions. During this time period, the source need not comply with the existing permit terms and conditions it seeks to modify. However, if the source fails to comply with its proposed permit terms and conditions during this time period, the existing permit terms and conditions it seeks to modify may be enforced against it. A permit shield granted under Part 18.10 shall not extend to minor permit modifications. The Department may not issue a final permit modification until after EPA's 45-day review period or until EPA has notified the Department that EPA will not object to issuance of the permit modification, whichever is first.	
29.	**Significant Modifications** Modifications that are significant modifications under the new source review permitting provisions of Part 2.4 (Prevention of Significant Deterioration) or Part 2.5 (Nonattainment Areas) regulations, are modifications under the NSPS or NESHAPS regulations, or otherwise do not meet the requirements for minor permit modifications from Section 18.13.3 of the Rules and Regulations must be incorporated in the Operating Permit using the requirements for sources initially applying for an Operating Permit, including those for applications, public participation, review by affected States, review by ADEM, and review by EPA, as described in Parts 18.4 and 18.15 of the Rules and Regulations.	18.13.4
30.	**Off-Permit Changes** Any change which is not addressed or prohibited in the federally enforceable terms and conditions of the permit may be designated by the owner or operator as an off-permit change, and may be made without revision to the federally enforceable terms and conditions of the operating permit, provided that the change: A. Meets all applicable requirements; B. Does not violate any federally enforceable permit term or condition; C. Is not subject to any requirement or standard under title IV of the Clean Air Act; and D. Is not a modification under title I.	18.14

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	The permittee must comply with all applicable state permitting and preconstruction review requirements. Any application pertaining to a change designated by the applicant as an off-permit change shall be submitted by the applicant to EPA in fulfillment of the obligation to provide written notice, provided, that no change meeting the criteria for an insignificant activity or trivial activity is subject to the procedures set forth in this condition.	
31.	**Property Rights and Privileges** No property rights of any sort or any exclusive privilege are conveyed through the issuance of this Operating Permit.	18.5.9
32.	**Economic Incentives** No permit revision shall be required under any approved economic incentives, marketable permit emissions trading and other similar programs or processes for changes that are provided for in the Operating Permit.	18.5.12
33.	**Emission Reduction Plan** Upon notification by this Department, the permittee shall submit an Air Pollution Emission Reduction Plan in a format approved by this Department concerning air contaminant emissions reductions to be taken during declared air pollution episodes.	18.2.8(b)
34.	**Obnoxious Odors** This Operating Permit is issued with the condition that should obnoxious odors arising from the plant operations be verified by Department inspectors, measures to abate the odorous emissions shall be taken upon determination by this Department that these measures are technically and economically feasible.	6.2.3
35.	**Title IV Requirements (Acid Rain Program)** Where an applicable requirement of the Rules and Regulations is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act (the acid rain program), both provisions shall be incorporated into the permit and shall be enforceable by the Administrator. Emissions exceeding any allowances that the permittee lawfully holds under title IV of the Act or the regulations promulgated thereunder are prohibited. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program, provided that such increases do not require a permit revision under any other applicable requirement. No limit shall be placed on the number of allowances held by the permittee, however, allowances may not be used as a defense to noncompliance with any other applicable requirement. Any such allowance shall be accounted for according to the procedures established in the regulations promulgated pursuant to Title IV of the Act.	18.5.1(b) 18.5.4
36.	**Title VI Requirements (Refrigerants)** Any facility having appliances or refrigeration equipment, including air conditioning equipment, which use Class I or Class II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR 82, Subpart A, Appendices A and B, shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR 82, Subpart F. A. No person shall knowingly vent or otherwise release any Class I or Class II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR 82, Subpart F. B. The responsible official shall comply with all reporting and recordkeeping requirements of 40 CFR §82.166. Reports shall be submitted to the U.S. EPA and the Department as required.	40 CFR 82 18.1.1(e)(10) 18.1.1(w)(4)

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37.	**Asbestos Demolition and Renovation** Demolition and renovation activities at this facility are subject to the National Emission Standard for Asbestos, 40 CFR 61, Subpart M. To determine the applicable requirements of the Standard, the permittee must thoroughly inspect the affected part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos-containing materials, prior to the commencement of the demolition or renovation operation. The permittee shall comply with all applicable sections of the Standard, including notification requirements, emission control and waste disposal procedures. The permittee shall also ensure that anyone performing asbestos-related work at the facility is trained and certified according to the Alabama Department of Environmental Management's regulations for Asbestos Contractor Certification.	40 CFR 61 14.2.12
38.	**Prevention of Accidental Releases** The permittee shall comply with the requirements of §112(r) of the Act and 40 CFR 68 to prevent accidental releases of any substance listed pursuant to §112(r) or any other extremely hazardous substance.	112(r) 40 CFR 68
39.	**Testing** A source emissions test may be required by this Department at any time. The permittee shall provide each point of emission with sampling ports, ladders, stationary platforms, and other safety equipment to facilitate testing. The permittee shall notify the Department in writing at least 60 days prior to conducting any required emissions test on any source, including but not limited to opacity and visible emission observations. This notice shall state the source to be tested, the proposed time and date(s) of the test, the purpose of the test, and the methods to be used. A site-specific test plan and quality assurance program shall be included for sources subject to NESHAP. The methods for such testing shall be in accordance with methods and procedures established by 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63 and any emissions unit specific permit requirements. Performance testing to demonstrate compliance with an NSPS or NESHAP shall include a test method performance audit as required by §60.8(g), §61.13(e), or §63.7(c)(2)(iii)(A), respectively. The permittee shall submit the results of all emissions tests in written form to this Department within a time period specified by this Department; however, not to exceed 30 days from the test completion date unless a longer period is specified in the applicable subpart.	1.9.1 1.10 18.2.5 18.2.8(c) 60.8(d) 60.8(e) 60.8(g) 61.05(d) 61.13 63.7(a)(3) 63.7(b)-(d) 63.9(e) 63.9(f) 63.10(d) 63.7340(d) 63.7515(f)
40.	**Retention of Records** Records of all required monitoring data, fuel consumption, analyses, reports, safety data sheet (SDS), and other support information shall be retained for a minimum of 5 years from the date when the record was generated. Records must be readily accessible and suitable for inspection. Each record must be kept onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, but may be maintained offsite for the remaining 3 years. Records may be kept in hard copy or electronically. Specific records to be made and retained are listed in the emission unit conditions.	18.5.3(b) 63.10(b)(1) 63.7343
	Facility-Specific General Conditions	
41.	**Fugitive Dust** A. The permittee shall take reasonable precautions to prevent dust from any operation, process, materials handling and storage, transportation activity (including dust from paved and unpaved roads), or construction activity (including but not limited to the use, repair, alteration, and demolition of buildings) at the facility from becoming airborne. B. The permittee shall not cause or allow the discharge of visible emissions which travel beyond the property line of the facility. C. When dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any rule or regulation, the Health Officer may order that the	6.2.1 6.2.2 6.2.3 18.2.4

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	building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas-borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. Airborne fugitive dust emissions shall be prevented and addressed as needed and as appropriate to weather conditions using any or all of the following pre-approved control measures specific to the following sources of fugitive dust: A. Use of vacuum truck, street sweeper or water truck on paved surfaces; B. Use of wet suppression system on unpaved surfaces and open storage piles when conditions are dry and fugitive dust could become airborne and leave property lines; C. Maintain existing roof/cover over material conveyors; D. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; and E. For the quarry, the permittee shall develop a Work Practice Plan to address the control of fugitive dust emissions. This plan shall be maintained and be kept readily available on-site for inspection. The Department reserves the right to require changes if excessive fugitive emissions are observed. The permittee shall notify the Department of any proposed changes to the plan for approval prior to updating the plan which is kept on-site. Wet suppression may be accomplished by the application of water with or without the addition of surfactants, wetting agents or other additives to increase the effectiveness of wet suppression. Manufacturer's documentation of the contents of any chemical, surfactant, wetting agent, or other additive used for dust suppression shall be maintained and readily made available upon request by the Department. Other dust control methods not listed above may be used subject to Department approval.	
42.	**Permit Shield and List of Non-Applicable Regulations** Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements included and specifically identified in the permit as of the date of permit issuance. All provisions within the General Conditions are applicable requirements unless otherwise noted. The Department has determined that the following requirements are not applicable to the source for the reasons listed: A. Part 5.2, "Incinerators," of the Rules and Regulations does not apply to Emissions Unit No. 005 as it does not meet the definition of an incinerator. B. Part 5.3, "Incineration of Wood, Peanut, and Cotton Ginning Wastes," of the Rules and Regulations does not apply to Emissions Unit No. 005 as it does not meet the definition of an incinerator. C. Part 6.3, "Fuel Burning Equipment," does not apply to Emissions Unit No. 005 as it does not meet the definition of fuel-burning equipment. D. Part 10.4, "Standards of Stationary Reciprocating Internal Combustion Engines," does not apply to Emissions Unit Nos. 062 and 064, as neither emitted greater than 1 ton per day of NO_x during the baseline period. E. 40 CFR 60, Subpart F, "Standards of Performance for Portland Cement Plants," does not apply to Emissions Unit Nos. 005 or 006. Pursuant to §60.62(d), the PM limits do not apply, as Emissions Unit Nos. 005 and 006 have demonstrated compliance with the more stringent PM limits of 40 CFR 63, Subpart LLL. The NO_x and SO_2 limits for kilns under Subpart F do not apply to Emissions Unit No. 005 based on construction date. Pursuant to §60.62(a)(2), the opacity limit under Subpart F does not apply for sources that use a PM CPMS. F. 40 CFR 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants," does not apply to Emissions Units No. 001 or 002 as the limestone quarry operations and equipment commenced construction prior to	18.10

No.	Federally Enforceable General Permit Conditions	Regulations
	August 31, 1983, and have not been reconstructed or modified since. Pursuant to §60.670(b), affected facilities under 40 CFR 60, Subpart F are not subject. G. 40 CFR 63, Subpart EEE, "National Emission Standards for Hazardous Air Pollutants form Hazardous Waste Combustors," does not apply as Emissions Unit No. 005 is not used to burn hazardous waste. This shield does not allow the permittee to violate any requirement that might be triggered by construction, reconstruction or modification of any equipment subject to applicable regulations.	
	Recordkeeping, Reports and Notifications for Entire Facility	
43.	**General Recordkeeping Requirements** The permittee shall keep records of facility-wide operations, activities and materials which have the potential to release pollutants into the atmosphere in sufficient detail to show compliance with permit conditions and to allow the annual calculation of emissions of regulated pollutants and HAP from each point and fugitive source and activity at the facility. In addition to the records required in the conditions specific to each emission unit, the permittee shall maintain records of the following: A. All reports and notifications submitted to comply with this permit; B. Results of all required performance testing, monitoring and sampling; C. Available EDS, SDS and/or other manufacturer supplied contents information relating to the VOC and HAP contents of materials used at the facility; D. For air filtration devices required by this permit, the date of filter replacement and the characteristics of the replacement filter materials; E. All spills or other mishaps of VOC/HAP materials. The record shall include the date, time, and quantity (gallons or pounds) of VOC/HAP materials spilled, recovered and the amount that evaporated to the atmosphere; and F. Records of required monitoring, including (as a minimum): 1. The date, place as defined in the permit, and time of sampling or measurements; 2. The date(s) analyses were performed; 3. The company or entity that performed the analyses; 4. The analytical techniques or methods used; 5. The results of such analyses; and 6. The operating conditions as existing at the time of sampling or measurement.	1.9.1 18.5.3(b) 18.7.1 70.6(a)(3)(C)
44.	**Submission of Reports and Notifications** The permittee shall submit all reports and notifications required by any permit condition and by any applicable NESHAP and/or NSPS to the Department. The reports may be sent by U. S. mail, or common courier (i.e. UPS or FedEx). Reports submitted by US mail shall be postmarked on or before the due date. Reports submitted by electronic mail shall be received on or before the due date. **Any application form, report or compliance certification required to be submitted pursuant to the Title V program regulations shall contain a certification by a responsible official that meets the requirements of Section 18.4.9 of the Rules and Regulations.** The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete. Each report shall identify the company name and address, the beginning and ending dates of the reporting period, and the date of report completion. The records required for each emissions unit shall be used in preparing these reports and notifications. The annual compliance certification shall be submitted to the following 2 agencies: Jefferson County Department of Health Air Pollution Control Program P.O. Box 2648 Birmingham, Alabama 35202-2648 and to EPA Region IV Atlanta Federal Center 61 Forsyth Street Atlanta, GA 30303	18.2.4 18.5.3

No.	Federally Enforceable General Permit Conditions	Regulations
	Submissions to EPA may be (or may be required to be) submitted electronically in compliance with the Cross-Media Electronic Reporting Rule (CROMERR, 40 CFR 3). The following reports and notifications are required to be submitted:	
	A. **Annual Emissions Calculation**, due February 10 of each year. The permittee shall maintain the records required in the emission unit conditions. The permittee shall make calculations of the previous year's actual emissions (point and fugitive) of all regulated air pollutants, as defined in Paragraph 18.1.1(w) of the Rules and Regulations, which emanate from the facility. The calculations shall include, but may not be limited to, the following pollutants: PM, PM_{10}, $PM_{2.5}$, SO_2, NO_X, CO, VOCs and HAPs. These calculations shall indicate the emissions from each emissions unit permitted, the fugitive emissions from on-site vehicular traffic, emissions from the combustion of motor fuels (diesel, gasoline, propane and natural gas), and emissions from spills, mishaps and other activities not elsewhere included. Documentation of the basis for the calculations, including but not necessarily limited to emission factors and relevant production data. Concurrence with the calculations by the Department shall be the basis for annual emission fees in accordance with Chapter 16 of the Rules and Regulations. Specific reporting requirements are located in: 1. Condition No. 6 for the Quarry Operations; 2. Condition No. 28 for the Kiln; 3. Condition No. 7 for the Clinker Cooler; 4. Condition No. 7 for Other Sources Subject to Subpart LLL; and 5. Condition No. 9 for Emergency Generators.	1.5.15 1.9.2 18.7.1
	B. **Annual Title V Compliance Certification:** A compliance certification with terms and conditions contained in the permit, including emissions limitations, standards and work practices, covering the period from October 23 to October 22 of the following year, shall be submitted by November 22 each calendar year. The permittee shall provide a means for monitoring the compliance of its air pollution sources with the emissions limitation, standards and work practices listed or referenced within this permit. The compliance certification shall include the following: 1. The identification of each term or condition of the permit that is the basis of the certification; 2. The emission unit or units to which the term or condition applies; 3. The compliance status; 4. Whether compliance has been continuous or intermittent; 5. The method(s) used for determining the compliance status of the source, currently and over the reporting period consistent with the permit's monitoring and recordkeeping requirements; and 6. Such other facts as the Department may require to determine the compliance status of the source.	18.7.5

No.	Federally Enforceable General Permit Conditions	Regulations
	C. **Annual NO_X Ozone Season Reporting to ADEM**, covering each calendar year, and due as follows: 1. By December 31 of each year, the permittee shall submit to the ADEM a written certification that compliance with the requirements of Section 10.1.3 has been maintained during that year's five-month period May 1 through September 30. The methods of determining that this compliance has been maintained shall be as specified on the major source operating permit issued for the facility at which the kiln is operated. 2. Annual Reporting: By March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR §§51.122(c)(1) and (2) must be submitted to the ADEM. 3. Triennial Reporting: By March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR §§51.122(c)(3) must be submitted to the ADEM.	10.1.4(b) 10.1.6
	D. **Annual Ozone Season Reporting to ADEM and JCDH:** Within 30 days of the end of each Ozone Season (May 1st – September 30th), the permittee shall report to the ADEM and the Department the total quantity of tons of NO_X emitted from the kiln stack. This report shall also include a list of times when the SNCR did not operate while the kiln was operating. For each instance when the SNCR did not operate, the permittee shall include the reason the SNCR did not operate as well as the corrective action(s) taken to return the SNCR to service.	SIP Contingency Measure from 4-07-0290-03 Condition 48, approved 7/30/2009 at 74 FR 37945 52.50(d)
	E. **Semi-Annual Monitoring and Compliance Report**, due July 30 (covering January, February, March, April, May and June) and January 30 (covering July, August, September, October, November and December of the previous year). Each report must identify the company name, the date of the report, and the beginning and end dates of the reporting period. The report must include, as a minimum: 1. If there are no deviations from any permit condition, a statement that there were no deviations during the reporting period. 2. Any and all instances of deviation from any permit condition during the reporting period must be clearly identified. 3. For each affected source required to install a CMS by a relevant standard, submit an excess emissions and continuous monitoring system performance report and/or summary report as required by §63.10(e). 4. If the total continuous monitoring system downtime for any CEM or any CMS is 10 percent or greater of the total operating time for the reporting period, submit an excess emissions and continuous monitoring system performance report along with the summary report.	1.5.15 1.9.2 18.2.4 18.5.3(c)(1) 18.7.1 63.1354(b)
	F. **Semiannual Report for Sources Subject to 40 CFR 63 Subpart LLL** to be submitted within 60 days of the reporting period via the Compliance and Emissions Data Reporting Interface (CEDRI), to include the following information: 1. Information specified in §63.10(e)(3)(vi). 2. All exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b). 3. Notification of any failure to calibrate thermocouples and other temperature sensors as required under § 63.1350(g)(1)(iii). 4. Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3). 5. Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a).	63.1354

No.	Federally Enforceable General Permit Conditions	Regulations
	6. For each PM CPMS, HCl, Hg, and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems. 7. If the total continuous monitoring system downtime for any CEMS or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, an excess emissions and continuous monitoring system performance report. 8. In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions. 9. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, the date, time, duration, and cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. a. For each event, include: i. The affected source or equipment; ii. An estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard; iii. Description of the method used to estimate the emissions; and iv. Description of actions taken during a malfunction to minimize emissions, including actions taken to correct a malfunction.	
	G. **Semiannual Report for Consent Decree Action No. 5:19-cv-05688.** Until the termination of Consent Decree No. 5:19-cv-05688, the following information, within thirty days after the end of each half calendar year, for the immediately preceding half calendar year, to be submitted to EPA and the Department: 1. All CEMS data collected for the kiln (EU 005) for the reporting period, reduced to 1-hour averages, in accordance with 40 CFR §60.13(h)(2), including an explanation of any periods of CEMS downtime together with missing data for which missing data substitution procedures were applied, in accordance with Section V.B and Section VI.C of the Consent Decree, in an electronic format and able to be manipulated with Microsoft Excel; 2. 30-day rolling average NO_x and SO_2 CEMS emission data for each day in the reporting period for demonstrating compliance with the applicable limits; and 3. Description of any noncompliance with the requirements of the Consent Decree and an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation.	Consent Decree Action No. 5:19-cv-05688
	H. **Compliance Schedule Progress Reports** shall be submitted in accordance with any compliance schedule the permittee is subject to or becomes subject to during the permit term.	18.4.8(h)
	I. **Results of performance testing and CMS performance evaluations** within 30 days after completion.	1.9.2 18.7.1 63.1354(b)(6)
	J. **Episodic prompt reporting of malfunctions, deviations, and violations** as follows: a. Deviations and violations of any permit condition, including but not limited to emission limitations, within 2 working days of the deviation or discovery of a violation at any source of air pollution. The report shall include the probable cause of any deviation and any corrective actions or preventative measures that were taken. Specific reporting requirements include: i. For Subpart LLL:	1.12 18.5.3(c)(2) 63.10(d)(5)(ii) 63.1354

No.	Federally Enforceable General Permit Conditions	Regulations
	1. As required by §63.10(e)(3), for each 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. 2. If the total continuous monitoring system downtime for any CEM or any CMS is 10 percent or greater of the total operating time for the reporting period, submit an excess emissions and continuous monitoring system performance report along with the summary report. 3. Semiannual reporting of the following: a. Exceedances of maximum control device inlet gas temperature limits; b. Any failure to calibrate thermocouples and other temperature sensors; c. Failure to conduct any combustion system component inspections conducted within the reporting period; d. Any and all failures to comply with any provision of the operation and maintenance plan; e. In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions; f. Information required by §63.1354(b)(10). ii. For Consent Decree 5:19-cv-05688: 1. A violation includes failing to perform any obligation required by the terms of the Consent Decree, including any work plan or schedule approved under the Consent Decree, according to all applicable requirements of the Consent Decree and within the specified time schedules established by or approved under the Consent Decree. Violation of an emission limit that is based on a 30-Day rolling average is a violation on every day on which the average is based. 2. If the permittee violates, or has reason to believe that it may violate, any requirement of the Consent Decree, the permittee shall notify EPA and the Department of such violation and its likely duration, in writing, within ten (10) business days of the day that the permittee first becomes aware of the violation, including the following information: a. Explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation and to mitigate any adverse effect of such violation. b. The permittee shall investigate the cause of the violation and shall then submit an amendment	

No.	Federally Enforceable General Permit Conditions	Regulations
	to the report required under Paragraph 54 of the Consent Decree, including a full explanation of the cause of the violation, within thirty (30) days of the day that the permittee becomes aware of the cause of the violation. 3. Whenever any violation of the Consent Decree, or of any applicable permits required under the Consent Decree, or any other event affecting the permittee's performance under the Consent Decree, or the performance of the source permitted herein, may pose an immediate threat to the public health or welfare or the environment, the permittee shall notify EPA and the Department, orally or by electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after the permittee first knew, or should have known, of the violation or event. This procedure is in addition to the requirements set forth in Paragraph 55 of the Consent Decree. 4. All reports for the Consent Decree shall be submitted to EPA and the Department, as designated in Section XX of the Consent Decree. 5. Each report submitted by the permittee under Section XII of the Consent Decree shall be signed by an official of the submitting party and including the certification under Paragraph 58 of the Consent Decree. a. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical. b. Malfunctions shall be reported within 24 hours and a statement shall be provided giving all pertinent facts, including the estimated duration of the breakdown. The permittee shall notify the Department when the condition causing failure or breakdown has been corrected, and such source, equipment, or facility is again in operation. Specific reporting requirements include: i. For Subpart LLL: 1. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, report semiannually the date, time, duration, and cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. a. For each event, include: i. The affected source or equipment; ii. An estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard; iii. Description of the method used to estimate the emissions; and iv. Description of actions taken during a malfunction to minimize emissions, including actions taken to correct a malfunction.	

No.	Federally Enforceable General Permit Conditions	Regulations
	K. **Notifications** as follows: a. Notification of performance testing as required by §63.7 and §63.9(e). b. Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f). c. 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. d. Notification within 48 hours of a Subpart LLL exceedance that triggers retesting to establish compliance and new operating limits. The notification requirements of §§63.7(b) and 63.9(e) do not apply to this retesting. e. Notifications of 40 CFR 63, Subpart A, as indicated in Table 1 of Subpart LLL. f. Initial notifications, as required by §63.9(b) through (d) and specified in §63.1353(b)(1). g. Any change in information already provided under 40 CFR 63 shall be submitted in writing within 30 calendar days after the change per §63.9(j). h. Notify the Department in writing within 2 working days of becoming subject to a federal Maximum Achievable Control Technology (MACT) standard pursuant to §112 of the Act (local requirement).	18.2.4 18.7.1 63.1353(b) 63.9(j)
	L. **Mandatory Greenhouse Gas Reporting (for informational purposes only):** The permittee shall be aware that the facility may be required to report emissions of greenhouse gases directly to EPA under the Mandatory Greenhouse Gas Reporting rules. The reporting threshold is annual greenhouse gas emissions equal to 25,000 metric tons CO_2e, calculated using the methods presented in 40 CFR 98. Mandatory greenhouse gas reporting is made directly to EPA and is not an enforceable requirement of this Title V Major Source Operating Permit. It is the permittee's responsibility to determine whether reporting is required each calendar year.	40 CFR 98

Federally Enforceable Conditions for Quarry Operations

Emissions Unit No.	Emissions Unit Description
001	Primary Jaw Crusher and Conveying System
002	Secondary Limestone Crusher (Hammer Mill) and Conveying

No.	Federally Enforceable Conditions for Quarry Operations	Regulations
1.	**Applicability** The emissions units permitted herein are subject to Part 6.1, "Visible Emissions," and Part 6.4, "Process Industries – General," of the Rules and Regulations.	6.1 6.4
2.	**Reconstruction and Modification** The emissions units are not subject to 40 CFR 60, Subpart OOO, "Standards of Performance for Nonmetallic Mineral Processing Plants," as construction of the units commenced prior to August 31, 1983, and the units have not been reconstructed or modified since. Pursuant to §60.670(d), when an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in §60.671, having the same function as the existing facility, and there is no increase in the amount of emissions, the new facility is exempt from the provisions of §60.672, §60.674, and §60.675, except when all existing facilities in a production line are replaced with new facilities. To claim this exemption, the permittee must submit the following information about the existing facility being replaced and the replacement equipment to the Department: A. For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station: 1. The rated capacity in megagrams or tons per hour of the existing facility being replaced. 2. The rated capacity in tons per hour of the replacement equipment. B. For a screening operation: 1. The total surface area of the top screen of the existing screening operation being replaced 2. The total surface area of the top screen of the replacement screening operation. C. For a conveyor belt: 1. The width of the existing belt being replaced. 2. The width of the replacement conveyor belt. D. For a storage bin: 1. The rated capacity in megagrams or tons of the existing storage bin being replaced. 2. The rated capacity in megagrams or tons of replacement storage bins. For any other modifications or reconstruction, as defined under §60.14 and §60.15, the permittee shall notify the Department prior to any reconstruction or modification, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.	18.2.4 18.5.3 60.14 60.15 60.670(d) 60.670(e) 60.671 60.673 60.676(a)
3.	**Emission Limitations for Quarry Equipment from the State Implementation Plan (SIP)** The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:	6.1.1 6.4.1

Pollutant	Limit	Authority
Particulate Matter (PM)	$E = 3.59p^{0.62}$, where E is emission rate (lb/hr) and p is the process weight rate (tons/hr), where $p < 30$ tons/hr *or* $E = 17.31p^{0.16}$, where E is emission rate (lb/hr) and p is the process weight rate (lb/hr), where $p \geq 30$ tons/hr	6.4.1

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Quarry Operations</th><th>Regulations</th></tr>
<tr><td></td><td>
<table>
<tr><th>Pollutant</th><th>Limit</th><th>Authority</th></tr>
<tr><td>Opacity</td><td>20 % opacity (6-minute average), except for one 6-minute period per hour of not more than 40 % opacity</td><td>6.1.1</td></tr>
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<tr><td>4.</td><td><u>Fugitive Particulate Matter</u>
To prevent fugitive particulate emissions, as required by General Condition No. 40, the permittee shall use a wet suppression system for the emissions units permitted herein. The work practice plan described in Item E of General Condition No. 40 shall be kept on-site and readily available for inspection and shall be implemented to prevent excessive fugitive dust.</td><td>18.5.3
6.2</td></tr>
<tr><td>5.</td><td><u>Visible Emissions Monitoring and Recordkeeping</u>
A. The permittee shall observe each crushing and conveying system according to EPA Method 22 at least once each week when the system operates. The observer shall permanently record the time and date of the observation, and the presence or absence of any visible emissions. If visible emissions are observed, corrective actions to eliminate the visible emissions shall be initiated within one hour. Within 24 hours of the completion of the corrective activities, the permittee shall again observe the crusher(s) operation. If visible emissions are present, a certified observer shall complete an EPA Method 9 Visible Emissions Evaluation within three business days to establish compliance with the opacity limitation.
B. A permanent record in the form of the date, time, and type of corrective action initiated to eliminate the visible emissions and the date and time the corrective actions were completed shall be provided in the same record that contained the initial observation.</td><td>18.5.3
6.1.1
6.1.2</td></tr>
<tr><td>6.</td><td><u>Recordkeeping Requirements</u>
The permittee shall maintain, as a minimum, the following records for each emissions unit to demonstrate compliance with the applicable requirements and to serve as basis for emissions calculations:
A. For annual production data reporting and emissions calculations:
1. The quantity of rock blasted and rock loaded (short tons);
2. The quantity of material processed in each crusher; and
3. The hours of operation for blasting, loading and each crusher for the previous calendar year.
B. For demonstrating compliance with the applicable requirements:
1. Records of visible emissions observations and any resulting corrective actions; and
2. The fugitive dust work practice plan.</td><td>1.5.15
1.9.2
18.5.3</td></tr>
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Summary Tables for Common 40 CFR 63, Subpart LLL Requirements

Affected Sources
Rotary Kiln
Raw Mill
Clinker Cooler
Finish Mill(s)
Raw Material, Clinker, or Finished Product Storage Bin
Conveying System Transfer Points
Bagging and Bulk Loading and Unloading Systems
Open Clinker Storage Piles

Requirement	Citation	Summary
General Duty to Minimize Emissions	· 63.1348(d)	Operate and maintain affected sources in a manner consistent with safety and good air pollution control practices for minimizing emissions
Operation and Maintenance Plan	· 63.1343(c) · 63.1347	Prepare and operate according to a written operations and maintenance (O&M) plan detailing the proper O&M of the affected sources under 40 CFR 63, Subpart LLL and air pollution control devices, including fugitive dust control measures for open clinker storage piles
Operational Changes	· 63.1348(c)	Performance testing is required, if an operational change is planned that may adversely affect compliance with an applicable standard, limit, or monitoring value under Subpart LLL
Continuous Monitoring	· 63.1348(b) · 63.1348(b)(1) · 63.1350(a)	Compliance with each applicable emissions and operating standard on a continuous basis
Site-Specific Monitoring Plan	· 63.1350(p)	For any applicable emissions limit under Subpart LLL that compliance is demonstrated through performance stack testing or other emissions monitoring, a site-specific monitoring plan is required that addresses proper O&M of continuous monitoring equipment
Performance Testing	· 63.1348(a) · 63.1349(a) · 63.1349(b)	Performance testing must be conducted according to the test methods and procedures of §63.1349 and §63.7, and reports must contain the information specified in §63.1349(a)
Parameter Monitoring	· 63.1350(m)(1) · 63.1350(m)(2) · 63.1350(m)(3) · 63.1350(m)(4)	Each CMS must be operated according to the general requirements of §63.1350(m)(1) through (4), with §63.1350(m)(5) through (11) containing additional requirements for specific parameters
Notifications	· 63.1353	Notifications are required: · As indicated in Table 1 of Subpart LLL · Initial notifications, as required by §63.9(b) through (d) · Prior to performance tests, visible emission observations, and/or CEMS performance evaluations · For notifying of compliance status · Within 48 hours of exceedances that trigger retesting
Reporting	· 63.1354	Reports must be submitted: · As indicated in Table 1 of Subpart LLL · For performance test, visible emission observations, and CEMS performance evaluations results · For excess emissions and continuous monitoring system performance reports, as required · Semiannually, containing the information of §63.1354(b)(9)

Requirement	Citation	Summary
Recordkeeping	· 63.1355	Records must be maintained of: · Information as required by §§§63.10(b)(2), 63.10(b)(3), and 63.10(c) · Applicability determinations · Information supporting waivers granted under §63.8(f)(6) · Daily clinker production rates · Information on startup and shutdown periods for affected sources subject to an operational standard for startup and shutdowns, including the quantity of feed and fuel used during that time · Information on malfunctions that causes an affected source to fail to meet a standard · Information on exceedances from an emissions standard or operating limit

Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL

Emissions Unit No.	Emissions Unit Description
003, 004, & 034	Kiln Feed Storage and Handling
005	Preheater Rotary Kiln with Loesche Mill
006	Clinker Cooler
007, 008, 009, 010, 013, & 063	Clinker Handling
011, 012 & 014	No. 5, No. 6, & No. 7 Clinker Finish Grinding Ball Mills
015, 016 & 017	Rotary Packing Machine and Cement Transfer System
018, 019, 022 & 023	"B" Silo Storage and Loadout
020, 021, 024, 025, 026, 027, 028, 029, 030 & 031	"C" Silo Storage and Loadout
051, 061, 052, 053, 054, 055, 056, 057, 058, 059 & 060	"D" Silo Storage and Loadout

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
1.	**Applicability** The affected sources under 40 CFR 63, Subpart LLL are the following: · Each kiln including alkali bypasses and inline coal mills; · Each clinker cooler; · Each raw mill; · Each finish mill; · Each raw material, clinker, or finished product storage bin; · Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln; · Each bagging and bulk loading and unloading system; and · Each open clinker storage pile. The following conditions are common requirements of Subpart LLL for the emissions units included in the table above or requirements shared between multiple of the emissions units. Equipment-specific emissions and operating standards, and associated performance testing and monitoring requirements are contained in subsequent sections. Table 1 of Subpart LLL provides cross references to the general provisions of 40 CFR 63, Subpart A indicating the applicability to Subpart LLL. For any new affected source under Subpart LLL, the compliance date is upon startup. For affected sources subject to a different emissions limit or requirement for the same pollutant under another regulation in Chapter I of Title 40, once the permittee is in compliance with the most stringent emissions limit or requirement, the less stringent requirement no longer applies. Until the permittee is in compliance with the more stringent limit, the less stringent limit continues to apply.	63.1340(a) 63.1340(b) 63.1342 63.1351(d) 63.1356
2.	**General Duty** At all times, the permittee must operate and maintain any affected source under Subpart LLL, 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 Department, which may include, but is not limited to, monitoring results, review of operation and	63.1348(d)

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	maintenance procedures, review of operation and maintenance records, and inspection of the source.	
3.	**Operation and Maintenance Plan Requirements** The permittee must prepare a written operations and maintenance plan. The plan must include the following information: A. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of §63.1343, §63.1345, and §63.1346. The operations and maintenance plan must address periods of startup and shutdown. B. Corrective actions to be taken when required by §63.1350(f)(3). C. Procedures to be used during an inspection of the components of the combustion system of each kiln and in-line raw mill at the facility for at least once per year. For each open clinker storage pile, the permittee must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in the operations and maintenance plan, required by §63.1347, that is appropriate for site conditions, as specified in §63.1343(c)(1) through (3). The operations and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles. A. The plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the permittee will use to minimize fugitive dust emissions from each open clinker storage pile. B. The plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles, as appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source. 1. Locating the source inside a partial enclosure. 2. Installing and operating a water spray or fogging system. 3. Applying appropriate chemical dust suppression agents. 4. Use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. C. Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days. Failure to comply with any provision of the operations and maintenance plan is a violation of the standard.	63.1343(c) 63.1347
4.	**Operational Changes** If the permittee plans to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under Subpart LLL, a performance test must be conducted, as specified in §63.1349(b). In preparation for and while conducting a performance test, the permittee may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the following conditions are met and temperature and other monitoring data recorded during the pretest operations are submitted: A. Provide the Department written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under Subpart LLL for any source, or as soon as practicable where 60 days advance notice is not feasible. 1. Notice provided must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for	63.1348(c)

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	completion of the performance test, including when the planned operational change period would begin. B. The performance test results must be documented in a test report according to §63.1349(a). C. A test plan must be made available to the Department prior to performance testing, if requested. D. The performance test must be completed within 360 hours after the planned operational change period begins.	
5.	**Continuous Monitoring Requirements** Compliance must be demonstrated with each applicable emissions and operating standard on a continuous basis for each affected source, as follows: A. Use the performance tests methods and procedures of §63.1350 and §63.8, as applicable. B. Monitor and collect data according to §63.1350 and the site-specific monitoring plan required by §63.1350(p). C. Except for periods of startup and shutdown, monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments), operate the monitoring system and collect data at all required intervals at all times the affected source is operating. D. Data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations may not be used to report emissions or operating levels. Data collected during all other periods must be used in assessing the operation of the control device and associated control system. 1. 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. E. For each existing unit equipped with a CMS, maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests. F. Any instance where the permittee fails to comply with the continuous monitoring requirements of §63.1350 is a violation.	63.1348(b) 63.1348(b)(1) 63.1350(a)
6.	**Site-Specific Monitoring Plan** For any applicable emissions limit that compliance is demonstrated through performance stack testing or other emissions monitoring, a site-specific monitoring plan must be developed according to the following requirements. A. For each CMS required by §63.1350, develop and submit to the Department for approval upon request, a site-specific monitoring plan that addresses the following requirements. 1. 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). 2. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. 3. Performance evaluation procedures and acceptance criteria (e.g., calibrations). 4. Ongoing operation and maintenance procedures in accordance with the general requirements of §63.8(c)(1), (c)(3), and (c)(4)(ii).	63.1350(p)

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	5. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d). 6. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of §63.10(c), (e)(1), and (e)(2)(i). B. Conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. C. Operate and maintain each CMS in continuous operation according to the site-specific monitoring plan.	
7.	**Performance Testing Requirements** Compliance with the applicable emissions standards and operating limits must be demonstrated using the tests methods and procedures of §63.1349 and §63.7. For demonstrating initial compliance, the first day of the 30 operating day performance test is the first day after the compliance date following completion of the field testing and data collection that demonstrates that the CPMS or CEMS has satisfied the relevant CPMS performance evaluation or CEMS performance specification (e.g., PS 2, 12A, or 12B) acceptance criteria. The performance test period is complete at the end of the 30th consecutive operating day. The permittee has the option of performing the compliance test earlier than the compliance date if desired. Performance tests must be conducted under such conditions as the Department specifies based on representative performance of the affected source for the period being tested. If requested, the site-specific test plan must be made available to the Department prior to testing. Performance test results shall be documented, as follows: A. A brief description of the process and the air pollution control system. B. Sampling location description(s). C. A description of sampling and analytical procedures and any modifications to standard procedures. D. Test results. E. Quality assurance procedures and results. F. Records of operating conditions during the performance test, preparation of standards, and calibration procedures. G. Raw data sheets for field sampling and field and laboratory analyses. H. Documentation of calculations. I. All data recorded and used to establish parameters for monitoring. J. Any other information required by the performance test method. K. For PM performance tests reports used to set a PM CPMS operating limit, include the following: 1. Make and model of the PM CPMS instrument. 2. Serial number of the instrument. 3. Analytical principle of the instrument (e.g., beta attenuation). 4. Span of the instruments primary analytical range. 5. Milliamp value or digital equivalent to the instrument zero output. 6. Technique by which the zero value was determined. 7. Average milliamp or digital equivalent signals corresponding to each PM compliance test run. L. For D/F performance test reports: 1. Continuous temperature records. 2. Average test run temperature.	63.1348(a) 63.1349(a) 63.1349(b)(1)(vii) 63.1349(b)(3)(ii) 63.1349(b)(3)(iv)

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
8.	**Parameter Monitoring Requirements** For each operating limit that requires the use of a CMS, the permittee must install, operate, and maintain each continuous parameter monitoring system (CPMS), according to the following general procedures. §63.1350(m)(5) through (11) contains requirements for specific parameter monitoring and is contained in subsequent conditions, as appropriate. A. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. A minimum of four successive cycles of operation to have a valid hour of data. B. Conduct all monitoring in continuous operation at all times that the unit is operating. C. Determine the 1-hour block average of all recorded readings. D. Record the results of each inspection, calibration, and validation check.	63.1350(m)(1) 63.1350(m)(2) 63.1350(m)(3) 63.1350(m)(4)
9.	**Notification Requirements** The permittee shall submit notifications, as follows: A. Notifications of 40 CFR 63, Subpart A, as indicated in Table 1 of Subpart LLL. 1. If any notice required by the Department contains all of the information required in a notification required by §63.1353, the permittee may send the Administrator a copy of the notice sent to the Department to satisfy the requirements for that notification. B. Notification requirements in §63.9, as follows: 1. Initial notifications, as required by §63.9(b) through (d) and specified in §63.1353(b)(1). a. A Title V or 40 CFR 70 permit application may be used in lieu of the initial notification under §63.9(b), provided the same information is contained in the permit application. Permit applications shall be submitted by the same due dates as those specified for the initial notification. 2. Notification of performance tests, as required by §63.7 and §63.9(e). 3. Notification of opacity and visible emission observations required by §63.1349 in accordance with §63.6(h)(5) and §63.9(f). 4. Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin. 5. Notification of compliance status, as required by §63.9(h). 6. Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the Department of the planned performance tests. The notification requirements of §63.7(b) and §63.9(e) do not apply to retesting required for exceedances under Subpart LLL.	63.1353
10.	**Reporting Requirements** The permittee shall submit reports, as follows: A. Reporting requirements of 40 CFR 63, Subpart A, as indicated in Table 1 of Subpart LLL. 1. If any report required by the Department contains all of the information required in a report required by §63.1354, the permittee may send the Administrator a copy of the report sent to the Department to satisfy the requirements for that report. B. Reporting requirements of §63.10, as follows: 1. As required by §63.10(d)(2), the results of performance tests as part of the notification of compliance status. 2. As required by §63.10(d)(3), the opacity results from tests required by §63.1349. 3. As required by §63.10(d)(4), if the permittee is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i)	63.1354

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	shall submit such reports by the dates specified in the written extension of compliance. 4. As required by §63.10(e)(2), written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e), submitted simultaneously with the results of the performance test. 5. As required by §63.10(e)(3), 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. 6. Performance testing results, as required by §63.1349(a) and §63.1354(b)(11) 7. A semiannual report according to the following requirements: a. Within 60 days of the reporting period, submit the semiannual report to EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) at https://www.cdx.epa.gov. i. Use the appropriate electronic report in CEDRI for Subpart LLL. (a) If the reporting form specific to Subpart LLL is not available at the time the report is due, submit the report to the Administrator at the appropriate address listed in §63.13. (b) Instead of using the electronic report in CEDRI, an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri), once the XML schema is available. ii. Begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. iii. Excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. b. The report must contain the following information: i. Information specified in §63.10(e)(3)(vi). ii. All exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b). iii. Notification of any failure to calibrate thermocouples and other temperature sensors as required under §63.1350(g)(1)(iii). iv. Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3). v. Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a). vi. For each PM CPMS, HCl, Hg, and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems. vii. In response to each violation of an emissions standard or established operating parameter limit, the date, duration and description of each violation and the specific actions taken for each violation including inspections, corrective actions and repeat performance tests and the results of those actions. viii. If the total continuous monitoring system downtime for any CEM or CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, submit an excess emissions	

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	and continuous monitoring system performance report along with the summary report. ix. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, report the failure and the following information: (a) Date, time, and duration of each event. (b) Cause of each event, including unknown cause, if applicable. (c) Sum of the number of the events in the reporting period. (d) The affected source or equipment. (e) Estimate of the amount of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard. (f) Description of the method used to estimate the emissions. (g) Description of actions taken during the malfunction to minimize emissions in accordance with §63.1348(d), including actions taken to correct a malfunction. 8. All reports required by Subpart LLL not subject to the requirements in the introductory text of §63.1354(b)(9) and §63.1354(b)(11) must be sent to the Administrator at the appropriate address in §63.13. The Administrator or the Department may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to the introductory text of §63.1354(b)(9) and §63.1354(b)(11) in paper format.	
11.	**Recordkeeping Requirements** The permittee shall maintain the following records in a form suitable and readily available for inspection and review. 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. A. All reports and notifications submitted for compliance with Subpart LLL. B. Records shall be maintained as required by §63.10(b)(2), §63.10(b)(3), and §63.10(c). C. All documentation supporting initial notifications and notifications of compliance status under §63.9. D. All records of applicability determination, including supporting analyses. E. If a waiver has been granted under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements. F. Records of daily clinker production rates. G. Records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup and shutdown period. H. Records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard. 1. If there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction. 2. The record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions.	63.1355

No.	Federally Enforceable Conditions Applicable to Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	3. Records of actions taken during periods of malfunctions to minimize emissions in accordance with §63.1348(d), including corrective actions to restore malfunctioning processes and air pollution control and monitoring equipment to its normal or usual manner or operation must also be kept. I. For each exceedance from an emissions standard or established operating parameter limit, records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.	

Kiln Summary Tables

NSR Requirements				
Parameter	**Limit**		**Control Equipment**	**Monitoring**
PM	19.27	lb/hr	Baghouse	CPMS
PM_{10}	19.27	lb/hr	Baghouse, Lime Injection System (for mill-off operations)	CPMS
VOC	17.24	lb/hr	N/A	THC CEMS
CO	524.82	lb/hr	N/A	CEMS
NO_x	625.89	lb/hr	Low NO_x Burners, SNCR	CEMS
SO_2	102.30	lb/hr	Kiln Inherent Scrubbing and/or Lime Injection System	CEMS
Clinker Production	1,006,000	tons/yr	N/A	Calibrated weigh scales, either directly weighing clinker produced or weighing kiln feed
Tire Fuel Feed Rate	22	% of maximum feed rate of coal	N/A	Hourly recordkeeping while tires are being combusted in the kiln
Wood Biomass as Kiln Fuel	Must meet the definition of clean cellulosic biomass under 40 CFR 241.2		N/A	Recordkeeping demonstrating that the biomass meets the definition of clean cellulosic biomass

Consent Decree Requirements		
Parameter	**Limit (lb/ton clinker)**	**Monitoring**
NO_x	2.5	CEMS
SO_2	0.4	CEMS
Clinker Production Rate	N/A	Calibrated weigh scales, either directly weighing clinker produced or weighing kiln feed

SIP Requirements		
Parameter	**Limit**	**Monitoring**
PM	For process weight rates of less than 30 tons/hour: $E = 3.59\ p^{0.62}$ For process weight rates equal to or greater than 30 tons/hour: $E = 17.31\ p^{0.16}$ Where: E = emission rate in pounds/hour for all similar process units, and p = process weight rate in tons/hour.	CPMS
	0.30 lb/ton kiln feed	
SO_2	1.8 lb/MMBTU	CEMS

SIP Requirements		
Parameter	**Limit**	**Monitoring**
PM	For process weight rates of less than 30 tons/hour: $E = 3.59\,p^{0.62}$ For process weight rates equal to or greater than 30 tons/hour: $E = 17.31\,p^{0.16}$ Where: E = emission rate in pounds/hour for all similar process units, and p = process weight rate in tons/hour.	CPMS
	0.30 lb/ton kiln feed	
Opacity	20%	Recordkeeping, proper operation and maintenance of baghouse

40 CFR 60, Subpart Y Requirements		
Parameter	**Limit (%)**	**Monitoring**
Opacity	20	Recordkeeping, proper operation and maintenance of baghouse

40 CFR 63, Subpart LLL Requirements			
Parameter	**Emissions Limit**	**Monitoring Parameter**	**Monitoring**
PM	0.07 pounds per ton clinker produced	Site-specific Limit	CPMS
D/F	· If the average temperature at the inlet to the first PM control device is greater than 400°F: 0.2 ng/dscm (TEQ) corrected to 7% oxygen; or · If the average temperature at the inlet to the first PM control device is less than 400°F: 0.4 ng/dscm (TEQ) corrected to 7% oxygen	Kiln Exhaust Gas Temperature Limit	CMS
Mercury	55 pounds per million tons of clinker produced, based on a 30-day rolling average and corrected for moisture	Mercury	Integrated sorbent trap monitoring system
		Exhaust Gas Flow Rate	CMS
THC	Based on a 30-day rolling average: · 24 ppmvd corrected to 7% oxygen, measured as propane; or · 12 ppmvd corrected to 7% oxygen for total organic HAP	THC	CEMS
HCl	3 ppmvd corrected to 7% oxygen, based on a 30-day rolling average	SO_2	CEMS

Operating Requirements		
Operating Requirement	**Citation**	**Summary**
Startup/Shutdown	· 63.1346(g)	During periods of startup and shutdown: · Use clean fuel, as specified, until the kiln reaches 1200°F · Combustion of primary fuel may commence when the kiln reaches 1200°F · All control devices controlling PM and HAPs must be operational
Clinker Production Monitoring	· 63.1348(b)(1)(iv) · 63.1348(b)(2) · 63.1350(d)	Determine hourly clinker production by operating permanent weigh scale systems to measure the amount of clinker produced or the amount of feed to the kiln
Lime Injection System	· 18.2.4	Operate a lime injection system to control PM_{10} during mill-off conditions
CEMS Performance Requirements	· 18.2.4 · Consent Decree No. 5:19-cv-05688 · Performance Specifications of 40 CFR 60 · 40 CFR 75, Subpart D	Operate CEMS in accordance with the performance specifications of 40 CFR 60 and the missing data substitution procedures of 40 CFR 75, Subpart D, as applicable for compliance with NSR and with the Consent Decree
Low NO_x Burners & SNCR	· 10.1.3 · 10.1.9 · 52.50(d)	· Operate low-NO_x burners and a SNCR system for the kiln from May 1st through September 30th · Continuously employ SNCR technology during ozone season by injecting either ammonia or urea · Operate the SNCR according to good engineering practices at all times to minimize NO_x while simultaneously minimizing NH_3 emissions · Install, operate, and maintain a system to continuously monitor and record reagent flow

Federally Enforceable Conditions for Kiln

Emissions Unit No.	Emissions Unit Description	Control Device
005	Pre-heater Rotary Kiln with Low-NO_X Burners, In-Line Coal Mill, In-Line Raw Mill, Conditioning Tower, and 2 Cyclones	270,815 SCFM Baghouse with Lime Injection and SNCR System

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Kiln</th><th>Regulations</th></tr>
<tr><td>1.</td><td><u>Applicability</u>
The emissions unit permitted herein is subject to production and emissions limits established pursuant to Consent Decree No. 5:19-cv-05688 and New Source Review. The emissions unit is also subject to Parts 6.1, “Visible Emissions,” Part 6.4, “Process Industries – General,” Part 6.10, “Cement Plants,” Part 7.1, “Fuel Combustion,” and Part 10.1, “Standards for Portland Cement Kilns,” of the Rules and Regulations. 40 CFR 63, Subpart LLL, “National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry,” 40 CFR 60, Subpart F, “Standards of Performance for Portland Cement Plants,” and 40 CFR 60, Subpart Y, “Standards of Performance for Coal Preparation and Processing Plants,” also apply.</td><td>6.1
6.4
6.10
7.1
10.1
18.2.4
60.250(a)
60.60
63.1340
4-07-0290-02
Consent Decree 5:19-cv-05688</td></tr>
<tr><td colspan="3">New Source Review Requirements</td></tr>
<tr><td>2.</td><td><u>Kiln Emissions Limits</u>
The kiln exhaust shall not exceed the emissions rates included in the table below.
<table>
<tr><th>Pollutant</th><th>Limit</th><th>Measurement Method</th></tr>
<tr><td>PM</td><td>19.27 lb/hr</td><td>Performance testing by EPA Method 5 of 40 CFR 60, Appendix A every 5 years</td></tr>
<tr><td>PM_{10}</td><td>19.27 lb/hr</td><td>Performance testing by EPA Methods 201A and 202 of 40 CFR 51, Appendix M every 5 years</td></tr>
<tr><td>VOC</td><td>17.24 lb/hr</td><td>Based on an average of 3 tests runs by EPA Method 25A of 40 CFR 60, Appendix A</td></tr>
<tr><td>CO</td><td>524.82 lb/hr</td><td>Based on a 30-day rolling average, as measured by CEMS</td></tr>
<tr><td>NO_x</td><td>625.89 lb/hr</td><td>Based on a 30-day rolling average, as measured by CEMS</td></tr>
<tr><td>SO_2</td><td>102.30 lb/hr</td><td>Based on a 30-day rolling average, as measured by CEMS</td></tr>
</table>
The permittee shall primarily demonstrate compliance with the PM and PM_{10} limits by complying with the limits under 40 CFR 63, Subpart LLL and with the NO_x and SO_2 limits under Consent Decree 5:19-cv-05688.</td><td>2.4
14.1.2
18.2.4
18.5.3
4-07-0290-02</td></tr>
<tr><td>3.</td><td><u>Annual Clinker Production Limit</u>
The maximum clinker production is limited to 1,006,000 tons per year as a 12-month rolling total. Within the first two weeks of each month, the permittee shall calculate and maintain record of a 12-month rolling total of the clinker production rate to determine compliance with the production limit. Monitoring data obtained from the clinker production monitoring required under 40 CFR 63, Subpart LLL shall be used to calculate the 12-month rolling total. The permittee shall report a violation within 2 working days of discovery. The permittee shall maintain record of the 12-month rolling total.</td><td>18.2.4
18.5.3
4-07-0290-02</td></tr>
<tr><td>4.</td><td><u>Automotive Tire Feed Rate Limit</u>
The permittee shall replace not more than 22% of the maximum feed rate of coal by an equivalent quantity of automotive tires by weight. During any period when the permittee combusts tires in the kiln, the permittee shall maintain hourly records of the quantity of each fuel combusted to demonstrate compliance with this restriction.</td><td>18.2.4
18.5.3
4-07-0290-01</td></tr>
</table>

No.	Federally Enforceable Conditions for Kiln	Regulations
5.	**Wood Biomass as Kiln Fuel** The permittee may use wood biomass, consisting of wood shavings and wood bark, that meets the definition of clean cellulosic biomass under 40 CFR §241.2 as fuel for the kiln. Records, such as chemical composition data or elemental analysis, demonstrating that the biomass satisfies the definition under §241.2 must be maintained.	18.2.4 18.5.3 241.2
6.	**Compliance Determination for PSD Avoidance VOC Emissions Limit** The source permitted herein shall have a VOC emission rate not to exceed 17.24 lb/hr based on the average of three test runs. The Department may require, at any time, a source emissions test to determine the VOC emissions rate, according to EPA Reference Method 25A of 40 CFR 60, Appendix A. For performance tests conducted to determine compliance with the total organic HAP emissions limit under 40 CFR 63, Subpart LLL, the report shall include the VOC emissions in pounds per hour for comparison to the VOC emissions limit.	18.2.4 18.5.3
7.	**CO, NO_X and SO_2 Emissions Monitoring for PSD Avoidance Limit** The permittee shall install, calibrate, maintain and continuously operate a continuous emissions monitor (CEM) located at the outlet of the baghouse to continuously monitor emissions of CO, NO_X and SO_2 for compliance with the emissions limitations in Condition No. 2. Each CEMS shall be installed maintained and operated as required by Performance Specifications of 40 CFR 60, Appendix B and the quality assurance procedures of 40 CFR 60, Appendix F.	18.2.4 18.5.3
8.	**Performance Specifications and Procedures for CEMS** The CEMS required by Condition No. 7 shall meet all specifications and procedures of 40 CFR 75 and will be certified and maintained in accordance with 40 CFR 75. In addition, each of the CEMS shall undergo a relative accuracy test audit (RATA). The RATA must be conducted at least once every four calendar quarters. A. NO_X and SO_2 CEMS must use the missing data substitution procedures of Part 75, Subpart D per the Consent Decree. B. For the CO CEMS, the permittee shall use the following missing data substitution procedures of Part 75, Subpart D with the following additional provisions because Part 75 does not provide for CO monitors: 1. The data filling process is split into three tiers based on the CEM availability of the continuous monitor, and is derived from 40 CFR 75.32. Equation 1 and 2 below show the calculation, with one method for the initial 8,760 unit operating hours (Eqn. 1) and a second method for afterward (Eqn. 2). Note that the availability calculation is performed separately for each monitor. $$\%\ Availability = \frac{Total\ unit\ operating\ hours\ for\ which\ data\ were\ recorded\ since\ certification}{Total\ unit\ operating\ hours\ since\ certification} \quad (1)$$ $$\%\ Availability = \frac{Total\ unit\ operating\ hours\ for\ which\ data\ were\ recorded\ in\ previous\ 8{,}760\ unit\ operating\ hours}{8{,}760} \quad (2)$$ 2. Using the availability, the data filling is then split into three routines depending on the percent availability, with subcategories for the two of the routines. a. Greater than or equal to 95% i. less than or equal to 24 hours of consecutive missing data ii. greater than 24 hours of consecutive missing data b. Greater than or equal to 90%, but less than 95% i. less than or equal to 8 hours of consecutive missing data ii. greater than 8 hours of consecutive missing data c. Less than 90%	18.5.3 4-07-0290-02 Consent Decree 5:19-cv-05688 40 CFR 75 40 CFR 60, Appendix F

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Kiln</th><th>Regulations</th></tr>
<tr><td></td><td>
3. Table 1 summarizes the CO data filling for the conditions described above. The filling routine is closely modeled on the data filling routines in Part 75.
<table>
<tr><th colspan="4">Table 1. Missing Data Procedure for CO</th></tr>
<tr><th colspan="2">Trigger Condition</th><th colspan="2">Calculation Routines</th></tr>
<tr><th>Monitor data availability (%)</th><th>Duration (N) of monitor outage (hr)</th><th>Method</th><th>Lookback period (monitor operating hours)</th></tr>
<tr><td>95 or more</td><td>N <= 24
N > 24</td><td>Arithmetic average
90th percentile</td><td>2,160
2,160</td></tr>
<tr><td>90 or more, but below 95</td><td>N<= 8
N > 8</td><td>Arithmetic average
95th percentile</td><td>2,160
2,160</td></tr>
<tr><td>Below 90</td><td>N > 0</td><td>Maximum monitored value</td><td>2,160</td></tr>
</table>
</td><td></td></tr>
<tr><td>9.</td><td>
<u>Lime Injection System Operating Parameter Monitoring</u>
The permittee shall operate a lime injection system to reduce PM_{10} emissions to no more than 19.27 lb/hr as required by the NSR/PSD avoidance limits, according to the following requirements:
A. Operate the system continuously during mill-off conditions.
1. Lime injection may be used during mill-on conditions to demonstrate compliance with the SO_2 emission limits under Consent Decree 5:19-cv-05688 and/or the current 30-day rolling average SO_2 ppmvw site-specific operating limit established under Subpart LLL.
B. Maintain records of the hourly quantity of lime injected during kiln operation.
C. Performance tests shall be conducted as follows:
1. Performance testing to determine compliance with the NSR/PSD avoidance limits is required every 5 years.
2. PM shall be measured by EPA Method 5 of 40 CFR 60, Appendix A, and shall include particulate matter from the “back half” of the sample train in addition to the “front half.”
3. PM_{10} shall be measured by EPA Methods 201A and 202 of 40 CFR 51, Appendix M.
4. During each mill-off PM_{10} performance test, the lime injection rate and the kiln feed rate shall be measured in tons per hour.
5. Establish a site-specific operating parameter limit for the lime injection system during mill-off PM_{10} performance testing for demonstrating compliance with the NSR avoidance limit.
6. The permittee shall compute and record the average lime injection rate for each sampling run in which the emissions limits are met during the mill-off PM_{10} performance test. The highest lime injection rate in tons per hour that was measured during the mill-off PM_{10} performance test in which compliance with the PM_{10} emissions limits was demonstrated shall become the minimum lime injection rate during operations and shall be the lime feed set point.
D. The permittee shall operate and maintain the average lime injection rate above the minimum parameter value established during the performance test, while the raw mill is off.
</td><td>18.2.4
18.5.3
4-07-0290-03</td></tr>
</table>

No.	Federally Enforceable Conditions for Kiln	Regulations
	E. The permittee may elect to conduct additional 3-hour mill-off PM_{10} performance tests in an effort to reduce the quantity of lime injected. At no time may the trial lime injection rate be reduced more than 25% below the lime injection rate than that used during the last successful test demonstration.	
10.	**NSR Recordkeeping Requirements** The permittee shall maintain the following records to demonstrate compliance with the applicable requirements: A. Results of performance tests; B. 12-month rolling total of clinker production rate; C. Hourly records of fuel feed rates when combusting tires; D. Records demonstrating wood used as kiln fuel satisfies the definition of clean cellulosic biomass under 40 CFR 241; E. Records of calibrations for lime flow meter; F. Records and reports as required by appendix F of 40 CFR 60 and the performance specifications of 40 CFR 60; and G. Results of annual RATAs.	1.9 18.5.3
Consent Decree 5:19-cv-05688 Requirements		
11.	**Consent Decree in Case 5:19-cv-05688-JFL, Document 2-1, Filed 12/03/19** The source of these requirements is the Consent Decree for the case styled "*UNITED STATES OF AMERICA, STATE OF INDIANA, STATE OF IOWA, STATE OF MARYLAND, STATE OF NEW YORK, PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, JEFFERSON COUNTY BOARD OF HEALTH, AND BAY AREA AIR QUALITY MANAGEMENT DISTRICT (Plaintiffs), v. LEHIGH CEMENT COMPANY LLC and LEHIGH WHITE CEMENT COMPANY, LLC,) (Defendants)*" as entered in the United States District Court, Eastern District of Pennsylvania on December 3, 2019. Specifically, Condition 43 of the Consent Decree requires the permittee to apply for: *"… the permit or approval, or the modification of an existing permit or approval, to require compliance with the following: a. all applicable 30-Day Rolling Average Emission Limits; b. all Continuous Operation or other operating requirements; c. all monitoring requirements of this Consent Decree, including those in Sections V (NOX Control Technology, Emission Limits and Monitoring Requirements) and VI (SO2 Control Technology, Emission Limits and Monitoring Requirements) of this Decree and relevant definitions from Section III (Definitions), such as the definition of 30-Day Rolling Average Emission Limit; d. all requirements included in Section IX (Prohibition on Netting Credits or Offsets from Required Controls); and e. all compliance methods imposed by this Consent Decree."*	Consent Decree 5:19-cv-05688

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Kiln</th><th>Regulations</th></tr>
<tr><td>12.</td><td><u>Emissions Limits</u>
The permittee shall comply with the following emissions limits for the kiln and commence continuous operation of the following control technology during all times of kiln operation by no later than the date specified in Tables 2 and 3 of the Consent Decree.
<table>
<tr><th>Pollutant</th><th>Limit</th><th>Control Technology</th><th>Compliance Demonstration</th></tr>
<tr><td>NO_x</td><td>2.5 lb/ton clinker</td><td>SNCR</td><td>Based on a 30-day rolling average, as measured by CEMS</td></tr>
<tr><td>SO_2</td><td>0.4 lb/ton clinker</td><td>Kiln Inherent Scrubbing and/or Lime Injection</td><td>Based on a 30-day rolling average, as measured by CEMS</td></tr>
</table></td><td>Paragraphs 12, 13, 20, and 21 of Consent Decree 5:19-cv-05688</td></tr>
<tr><td>13.</td><td><u>Daily Clinker Production Rate Monitoring</u>
The permittee shall determine and record the daily clinker production rates by either one of the two following methods:
A. 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; or
B. 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.
If the permittee chooses the methodology set forth in Item B above to determine the daily clinker production rates, the permittee shall calculate the 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 no less frequently than once per month. If this ratio changes at clinker reconciliation, the new ratio must be used going forward, but shall not be applied retroactively to change clinker production rates previously estimated.</td><td>Paragraph 16 of Consent Decree 5:19-cv-05688</td></tr>
<tr><td>14.</td><td><u>CEMS Requirements</u>
The permittee shall install, certify, calibrate, maintain, and operate a NO_x and a SO_2 CEMS at each stack which collects emissions from the kiln in accordance with the applicable requirements of 40 CFR 60 to demonstrate compliance with the NO_x and SO_2 limits established in Consent Decree 5:19-cv-05688. Except during CEMS breakdowns, repairs, calibration checks, zero span adjustments, and any stack repairs that require the removal and recalibration of the CEMS, the CEMS shall be operated at all times during kiln operation. NO_x and SO_2 emission rates from the kiln stack shall be monitored and recorded in units of ppm, pounds per hour, and pounds per ton clinker. During any time when the CEMS is inoperable or otherwise not measuring emissions of NO_x and/or SO_2 from the kiln, the permittee shall apply the missing data substitution procedures of 40 CFR 75, Subpart D.</td><td>Paragraphs 15, 17 through 19, and 26 through 30 of Consent Decree 5:19-cv-05688</td></tr>
<tr><td>15.</td><td><u>Requirements for Temporary Cessation of Kiln Operations</u>
If the permittee temporarily ceases kiln operation for 24 consecutive months subsequent to the effective date of Consent Decree 5:19-cv-05688, then prior to recommencing kiln operation, the permittee must first apply for and obtain applicable permits required under the PSD and/or NNSR permitting programs.</td><td>Paragraph 39 of Consent Decree 5:19-cv-05688</td></tr>
<tr><td>16.</td><td><u>Prohibition on Netting Credits or Offsets from Required Controls</u>
The permittee shall neither generate nor use any CD emissions reductions as netting reductions, as emissions offsets, or to apply for, obtain, trade, or sell any emission reduction credits. Baseline actual emissions for each unit during any</td><td>Section IX of Consent Decree 5:19-cv-05688</td></tr>
</table>

No.	Federally Enforceable Conditions for Kiln	Regulations
	24-month period selected by the permittee shall be adjusted downward to exclude any portion of the baseline emissions that would have been eliminated as CD emissions reductions had the permittee been complying with Consent Decree 5:19-cv-05688 during that 24-month period. Any plant-wide applicability limits (PALs) or PAL-like limits that apply to emissions units addressed by Consent Decree 5:19-cv-05688 must be adjusted downward to exclude any portion of the baseline emissions used in establishing such limit(s) that would have been eliminated as CD emissions reductions had the permittee been complying with Consent Decree 5:19-cv-05688 during such baseline period. This prohibition is not intended to prohibit the permittee from seeking to do any of the following: A. Use or generate emission reductions from emission units that are covered by Consent Decree 5:19-cv-05688 to the extent that the proposed emission reductions represent the difference between CD emissions reductions and more stringent control requirements that the permittee may elect to accept for those emissions units in a permitting process; B. Use or generate emission reductions from emissions units that are not subject to an emission limitation or control requirement pursuant to Consent Decree 5:19-cv-05688; or C. Use CD emissions reductions for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area (excluding PSD and non-attainment NSR rules, but including, for example, Reasonably Available Control Technology (RACT) rules) that apply to the facility; provided, however, that the permittee shall not be allowed to trade or sell any CD emissions reductions.	
17.	**<u>Violation Reporting Requirements</u>** A violation includes failing to perform any obligation required by the terms of the Consent Decree, including any work plan or schedule approved under the Consent Decree, according to all applicable requirements of the Consent Decree and within the specified time schedules established by or approved under the Consent Decree. Violation of an emission limit that is based on a 30-Day rolling average is a violation on every day on which the average is based. The permittee reserves the right to contest whether there has been a violation in accordance with Section XVI (Dispute Resolution) of the Consent Decree. If the permittee violates, or has reason to believe that it may violate, any requirement of the Consent Decree, the permittee shall notify EPA and the Department of such violation and its likely duration, in writing, within ten (10) business days of the day that the permittee first becomes aware of the violation, including the following information: A. Explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation and to mitigate any adverse effect of such violation. B. The permittee shall investigate the cause of the violation and shall then submit an amendment to the report required under Paragraph 54 of the Consent Decree, including a full explanation of the cause of the violation, within thirty (30) days of the day that the permittee becomes aware of the cause of the violation. C. This requirement does not relieve the permittee of its obligation to provide the notice required by Section XIV of the Consent Decree (Force Majeure) if the permittee contends a Force Majeure event occurred. Whenever any violation of the Consent Decree, or of any applicable permits required under the Consent Decree, or any other event affecting the permittee's performance under the Consent Decree, or the performance of the source permitted herein, may pose an immediate threat to the public health or welfare or the environment, the permittee shall notify EPA and the Department, orally or by	Paragraphs 55 through 56 and 61 of Consent Decree 5:19-cv-05688

No.	Federally Enforceable Conditions for Kiln	Regulations
	electronic or facsimile transmission as soon as possible, but no later than twenty-four (24) hours after the permittee first knew, or should have known, of the violation or event. This procedure is in addition to the requirements set forth in Paragraph 55 of the Consent Decree. All reports for the Consent Decree shall be submitted to EPA and the Department, as designated in Section XX of the Consent Decree. Each report submitted by the permittee under Section XII of the Consent Decree shall be signed by an official of the submitting party and including the certification under Paragraph 58 of the Consent Decree. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.	
18.	**Reporting Requirements** Within thirty days after the end of each half calendar year after the effective date, until termination of the Consent Decree pursuant to Section XXIV, the permittee shall submit a semi-annual report to EPA and the Department for the immediately preceding half calendar year period that shall: A. Identify any and all dates on which the permittee has installed or described the progress of installation of each control technology required for the kiln under Section V and Section VI and describe any problems encountered or anticipated during such installation, together with implement or proposed solutions. B. Identify any and all dates on which the permittee has completed installation of or describe the progress of installation of each CEMS required under Section V.B and Section VI.C and describe any problems encountered or anticipated during such installation, together with implemented or proposed solutions. C. Provide, in electronic format and able to be manipulated with Microsoft Excel, all CEMS data collected for the kiln, reduced to 1-hour averages, in accordance with 40 CFR §60.13(h)(2), including an explanation of any periods of CEMs downtime together with any missing data for which missing data substitution procedures were applied. D. Demonstrate compliance with all applicable 30-day rolling average emission limits, including but not limited those in Section V and Section VI. E. Provide a complete description and status of all actions that the permittee has undertaken to comply with each of the appendices of the Consent Decree. F. Describe the status of permit applications and any proposed SIP revisions required under the Consent Decree. G. Describe the status of any operation and maintenance work relating to activities required under the Consent Decree. H. Describe any noncompliance with the requirements of the Consent Decree and an explanation of the violations likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. All reports for the Consent Decree shall be submitted to EPA and the Department, as designated in Section XX of the Consent Decree. Each report submitted by the permittee under Section XII of the Consent Decree shall be signed by an official of the submitting party and including the certification under Paragraph 58 of the Consent Decree. This certification requirement does not apply to emergency or similar notifications where compliance would be impractical.	Paragraphs 54 and 57 through 60 of Consent Decree 5:19-cv-05688
19.	**Records Retention** Until five years after the termination of the Consent Decree, the permittee shall retain, and shall instruct its contractors and agents to preserve, all non-identical copies of all documents, records, or other information (including documents, records, or other information in electronic form) in its or its contractors' or	Paragraphs 88 through 91 of Consent Decree 5:19-cv-05688

No.	Federally Enforceable Conditions for Kiln	Regulations
	agents' possession or control, or that come into its or its contractors' or agents' possession or control, and that relate in any manner to the permittee's performance of its obligations under the Consent Decree. This information-retention requirement shall apply regardless of any contrary corporate or institutional policies or procedures. At any time during this information-retention period, upon request by EPA or the Department, the permittee shall provide copies of any documents, records, or other information required to be maintained by it under Paragraph 88 of the Consent Decree. At the conclusion of the information-retention period provided in Paragraph 88, the permittee shall notify EPA and the Department at least ninety (90) days prior to the destruction of any documents, records, or other information subject to the requirements of Paragraph 88 of the Consent Decree and, upon request by EPA or the Department, the permittee shall deliver any such documents, records, or other information to EPA or the Department. The permittee may assert that certain documents, records, or other information is privileged under the attorney-client privilege or any other privilege recognized by federal law. If the permittee asserts such a privilege, it shall provide the following: A. Title of the document, record, or information; B. Date of the document, record, or information; C. Name and title of each author of the document, record, or information; D. Name and title of each addressee and recipient; E. Description of the subject of the document, record, or information; and F. Privilege asserted by the permittee. However, no documents, records, or other information created or generated pursuant to the requirements of the Consent Decree shall be withheld on grounds of privilege. The permittee may also assert that information required to be provided is protected as Confidential Business Information ("CBI") under 40 CFR. Part 2 and Section 1.6.8 of the Rules and Regulations. As to any information that the permittee seeks to protect as CBI, the permittee shall follow the procedures set forth in 40 CFR Part 2 and Section 1.6.8 of the Rules and Regulations. The Consent Decree in no way limits or affects any right to obtain information, held by EPA or the Department pursuant to applicable federal or state laws, regulations, or permits, nor does it limit or affect any duty or obligation of the permittee to maintain documents, records, or other information imposed by applicable federal or state laws, regulations, or permits.	
State Implementation Plan Requirements		
20.	**SIP Applicability** The emissions unit permitted herein is subject to the opacity limit of Part 6.1, the particulate matter emissions limit of Part 6.4, the sulfur oxides emissions limit of Part 7.1, and the particulate matter emissions limit of Part 6.10 of the Rules and Regulations.	6.1 6.4 7.1 6.10
21.	**Visible Emissions Restriction** The emissions unit permitted herein is subject to a 20% opacity limit, except as allowed by Section 6.1.1(b) of the Rules and Regulations.	6.1 18.2.4
22.	**Particulate Matter Emissions Limit** The permittee shall demonstrate compliance with the particulate matter emissions limits under Part 6.4 and Part 6.10 by complying with the particulate matter emissions limit under 40 CFR 63, Subpart LLL.	6.4 6.10 14.1.2 18.2.4
23.	**Sulfur Oxides Emissions Limit** The permittee shall demonstrate compliance with the sulfur oxides emissions limit under Part 7.1 of the Rules and Regulations by complying with the SO_2 limit under Consent Decree 5:19-cv-05688.	7.1 18.2.4 Consent Decree 5:19-cv-05688

No.	Federally Enforceable Conditions for Kiln	Regulations
24.	**NO_X Equipment Standard for Ozone Season** The permittee shall not operate the kiln during May 1st through September 30th, unless low-NO_X burners and Selective Non-Catalytic Reduction (SNCR) technology have been installed and are operated. The requirements of Part 10.1 of the Rules and Regulations shall not apply to periods of scheduled maintenance activities that affect NO_x emissions.	10.1.3 10.1.9 52.50(d)
25.	**SNCR Requirements for NO_X Emissions During Ozone Season** A. During each ozone season, the permittee shall continuously employ SCNR by injecting either ammonia or a urea solution at a site where the temperature of the process gas is conducive for the reduction reactions to occur. B. The SNCR system shall be operated according to good engineering practices and shall, at all times, be operated in a manner so as to minimize the emissions of NO_X while simultaneously minimizing excess ammonia (NH_3) emissions. C. The permittee shall install, operate, and maintain a system to continuously monitor and record reagent flow to the SNCR system. D. If the reagent monitoring system indicates that there is no reagent flow to the SNCR and the kiln system is in stable operation and the minimum process gas temperature for reagent injection has been reached, the permittee shall, within one hour, initiate attempts for corrective action to return the reagent injection system to service. After the discovery of no reagent flow, the permittee shall re-establish flow no later than 24 hours of said event.	10.1.3 52.50(d) SIP Contingency Measure from 4-07-0290-03 Conditions 45-47, approved 7/30/2009 at 74 FR 37945
26.	**Ozone Season Reporting Requirements to ADEM** The permittee shall submit data, electronically and in a format prescribed and provided by ADEM, which reports the total NO_x emissions from May 1st through September 30th of each year, as follows: A. For each kiln, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR §§51.122(c)(1) and (2) must be submitted to ADEM. B. For each kiln, every three years, by March 31st of the calendar year following the emission year being reported, the data specified in 40 CFR §§51.122(c)(3) must be submitted to ADEM. C. By December 31st of each year, written certification that compliance with the requirements of Section 10.1.3 of the Rules and Regulations has been maintained during that year's five-month period of May 1st through September 30th must be submitted to ADEM. The methods of determining that this compliance has been maintained shall be as specified in this permit. D. Within 30 days of the end of each ozone season, the permittee shall report to the Department the total quantity of NO_x emitted from the kiln stack. This report shall include list of times when the SNCR did not operate while the kiln was operating. For each instance when the SNCR did not operate, the permittee shall include the reason the SNCR did not operate, as well as the corrective action(s) taken to return it to service.	10.1.4 10.1.6 18.5.3
27.	**Ozone Season Recordkeeping Requirements** The permittee shall maintain records for May 1st through September 30th of each year that include the data as follows: A. The date, time, and duration of any startup, shutdown, or malfunction in the operation of the cement kiln or its emissions monitoring equipment or of any scheduled maintenance activity that affects NO_x emissions or emissions monitoring; B. The results of any compliance testing; and C. Other data required by this permit.	10.1.7 10.1.8

No.	Federally Enforceable Conditions for Kiln	Regulations
	These records shall be retained on-site for a minimum of 2 years following the calendar year for which they are made and shall be made available to ADEM for review upon request.	
28.	**SIP Recordkeeping Requirements** The permittee shall maintain, as a minimum, the following records to demonstrate compliance with the applicable requirements and to serve as basis for emissions calculations: A. For annual production data reporting and emissions calculations: 1. Quantity and average moisture content of kiln feed (tons); 2. Quantity of clinker produced (tons); 3. Quantity of fuels used by type; 4. Quantity of lime injected; 5. Quantity of aqueous ammonia (or urea) injected; 6. Total hours of operation of the kiln; 7. Total hours of operation of the Loesche (raw) mill; 8. Mill-On hours of operation of the kiln; and 9. Mill-Off hours of operation of the kiln. B. For demonstrating compliance with the applicable requirements. 1. Performance test results; and 2. Records and reports, as required by Part 10.1 of the Rules and Regulations.	1.5.15 1.9.2 18.5.3
	NSPS Requirements	
29.	**40 CFR 60, Subpart F Applicability** 40 CFR 60, Subpart F applies to kilns located at Portland Cement plants that commenced construction or modification after August 17, 1971. Pursuant to §60.62(a)(2), kilns that use a PM CPMS are not subject to the opacity limit under Subpart F. Pursuant to §60.62(d), sources subject to Subpart F that are in compliance with a more stringent emissions limit or requirement under Title 40 are not subject to the less stringent requirement. If the kiln is modified or reconstructed, as defined under §60.14 and §60.15, it will become subject to the NO_x and SO_2 limits under Subpart F for new sources and revision of the Permit could be required. The permittee shall notify the Department prior to any reconstruction, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.	60.14 60.15 60.60 60.62(a)(2) 60.62(a)(3) 60.62(a)(4) 60.62(d)
30.	**40 CFR 60, Subpart Y Applicability** 40 CFR 60, Subpart Y, "Standards of Performance for Coal Preparation and Processing Plants," applies to coal preparation and processing plants that process more than 181 megagrams (200 tons) of coal per day. For coal processing and conveying equipment, storage systems, and transfer and loading systems that commenced construction before April 28, 2008, the permittee shall not cause gases which exhibit an opacity of 20 percent or greater to be discharged into the atmosphere. If the in-line coal mill and associated handling and transfer equipment is modified or reconstructed, as defined under §60.14 and §60.15, additional requirements under Subpart Y could become applicable and revision of the Permit could be required. The permittee shall notify the Department prior to any reconstruction, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.	60.14 60.15 60.250(a) 60.250(b) 60.254(a) 60.254(b) 60.254(c)

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Kiln</th><th>Regulations</th></tr>
<tr><td colspan="3">40 CFR 63, Subpart LLL Requirements</td></tr>
<tr><td>31.</td><td><u>40 CFR 63, Subpart LLL Applicability</u>
For the emissions unit permitted herein, the affected source under 40 CFR 63, Subpart LLL is each kiln located at a Portland cement plant, including any associated preheaters, inline raw mills, and inline coal mills. The kiln is an existing source under Subpart LLL, as construction commenced before May 6, 2009, and it has not been reconstructed since.</td><td>63.1340(a)
63.1340(b)(1)
63.1340(b)(3)
63.1341
63.1342</td></tr>
<tr><td>32.</td><td><u>Kiln Standards</u>
The kiln is subject to the following standards at all times of operation, except that the work practices of §63.1346(g) apply during periods of startup and shutdown.
<table>
<tr><th>Parameter</th><th>Limit</th></tr>
<tr><td>PM</td><td>0.07 pounds per ton clinker produced</td></tr>
<tr><td>D/F</td><td>· If the average temperature at the inlet to the first PM control device is greater than 400°F: 0.2 ng/dscm (TEQ) corrected to 7% oxygen; or
· If the average temperature at the inlet to the first PM control device is less than 400°F: 0.4 ng/dscm (TEQ) corrected to 7% oxygen</td></tr>
<tr><td>Mercury (Hg)</td><td>55 pounds per million tons of clinker produced, based on a 30-day rolling average and corrected for moisture</td></tr>
<tr><td>THC</td><td>Based on a 30-day rolling average:
· 24 ppmvd corrected to 7% oxygen, measured as propane; or
· 12 ppmvd corrected to 7% oxygen for total organic HAP</td></tr>
<tr><td>HCl</td><td>3 ppmvd corrected to 7% oxygen, based on a 30-day rolling average</td></tr>
</table>
The 30-day period means all operating hours within 30 consecutive kiln operating days excluding periods of startup and shutdown. For existing kilns that combine the coal mill exhaust with the kiln exhaust and send the combined exhaust to the PM control device as a single stream, an alternative PM emission limit, calculated by Equation 1 of §63.1343(b)(2), may be met. If the kiln is reconstructed, the emission limits for a new kiln under Subpart LLL will become applicable, and performance testing to demonstrate compliance with the new limits, and revision to the Permit would be required. The permittee shall notify the Department prior to any reconstruction, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.</td><td>63.1343
63.1345
63.2
18.5.3</td></tr>
<tr><td>33.</td><td><u>Startup and Shutdown Requirements</u>
During periods of startup and shutdown, the permittee shall meet the following requirements:
A. Use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200°F.
B. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200°F.
C. All air pollution control devices must be turned on and operating during startup and shutdown, except as allowed by §63.1346(g)(3) and §63.1348(b)(9).
Records as specified in §63.1355 must be kept during periods of startup and shutdown.</td><td>63.1346(g)
63.1348(b)(9)
63.1555</td></tr>
</table>

No.	Federally Enforceable Conditions for Kiln	Regulations
34.	**Clinker Production Monitoring Requirements** The permittee shall determine the hourly production rate of clinker, according to the requirements of §63.1350(d), as follows: A. Determine hourly clinker production by one of two methods: 1. 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; or 2. 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. a. The system of measuring feed must be maintained within ±5 percent accuracy. b. Calculate the 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. Update this ratio monthly. If this ratio changes at clinker reconciliation, use the new ratio going forward, but it is not required to retroactively change clinker production rates previously estimated. B. Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). 1. During each quarter of source operation, determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow). C. If clinker production is measured directly, record the daily clinker production rates. D. If kiln feed rates are measured and clinker production calculated, record the hourly kiln feed and clinker production rates. E. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4).	63.1348(a)(iv) 63.1348(b)(1)(iv) 63.1350(d)
35.	**Particulate Matter Requirements** A. **Monitoring Requirements**. The permittee shall demonstrate continuous compliance with the particulate matter emission standards of Subpart LLL, according to the requirements of §63.1350(b), as follows: 1. The permittee shall use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit and use the CPMS to demonstrate continuous compliance with this operating limit. a. To determine continuous compliance, PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control must be used. i. All quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day, must be used. Equation 7 of §63.1349(b)(1)(v) shall be used to calculate the 30 operating day rolling average basis. B. **Performance Testing.** Performance testing shall be conducted annually to reassess and adjust the site-specific operating limit in accordance with the test results.	63.1348(b)(2) 63.1349(b)(1) 63.1349(c) 63.1350(b) 63.1350(d)

No.	Federally Enforceable Conditions for Kiln	Regulations
	1. Performance testing shall be conducted according to Method 5 or Method 5I of appendix A-3 of 40 CFR 60 and the procedures of §63.1349(b)(1)(i) through (iv). 2. The particulate matter collected in the impingers "back half" of the Method 5 or Method 5I particulate sampling train need not be determined to demonstrate compliance with the PM standard. This shall not preclude the Department from requiring a determination of the "back half" for other purposes. 3. The site-specific operating limit shall be established using the procedures of §63.1349(b)(1)(i) through (iv), as appropriate, based upon the PM emissions level determined through the performance test. 4. Performance testing must be repeated if the analytical range of the instrument is changed, if the instrument itself is replaced, or if any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration. 5. An existing operating limit must be verified or a new operating limit established after each repeated performance test. 6. Each performance test shall consist of at least three separate test runs under the conditions that exist when the kiln is operating at the level reasonably expected to occur. a. Each test run shall be conducted to collect a minimum sample volume of 1 dscm. b. The time-weighted average of the results from the three consecutive runs shall be calculated and used to determine compliance. 7. Testing must be conducted for raw mill on conditions and for raw mill off conditions. 8. Performance tests must be completed no more than 13 months after the previous performance test. C. **Exceedances.** For any exceedance of the 30-process operating day PM CPMS average value from the established operating limit, the permittee must: 1. Within 48 hours of the exceedance, visually inspect the APCD; 2. If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value. 3. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. It is not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under §63.1350(b)(1)(iii). 4. PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of Subpart LLL.	
36.	**<u>Dioxin and Furans Requirements</u>** A. **Monitoring Requirements.** The permittee shall demonstrate compliance using a continuous monitoring system (CMS) that is installed, operated, and maintained to record the temperature of specified gas streams in accordance with the requirements of §63.1350(g)(1) through (5), as follows: 1. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4).	63.1346(a) 63.1346(b) 63.1348(b)(4) 63.1349(b)(3) 63.1349(c) 63.1350(g)

No.	Federally Enforceable Conditions for Kiln	Regulations
	2. Install, calibrate, maintain, and continuously operate a CMS to continuously record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PM control device (PMCD) PMCD. a. 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). b. 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. c. The calibration of all thermocouples and other temperature sensors must be verified at least once every three months. d. The required minimum data collection frequency must be one minute. e. Every hour, record the calculated rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. f. 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. B. **Operating Requirements.** The permittee shall operate the kiln such that the temperature of the gas at the inlet to the kiln PMCD does not exceed the applicable temperature limit established during performance testing, conducted according to §63.1349(b)(3)(iv), except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent. A separate operating parameter must be established for both mill-on and mill-off conditions. C. **Performance Testing.** Performance tests shall be conducted using Method 23 of appendix A-7 to 40 CFR 60 and the procedures of §63.1349(b)(3), as follows: 1. Each performance test must consist of three separate runs conducted under representative conditions, for raw mill on and raw mill off conditions. a. 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). 2. The temperature at the inlet to the kiln or in-line kiln/raw mill 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. 3. Average temperatures must be calculated for each run of the performance test. 4. The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1346(b). 5. Performance tests are required at regular 30-month intervals. Performance tests must be completed no more than 31 calendar months after the previous performance test.	
37.	**THC Requirements** A. **Monitoring Requirements.** The permittee shall demonstrate compliance with the total organic HAP emissions limit of Subpart LLL by conducting monitoring according to §63.1350(i)(1) and (2), as follows, or in accordance	63.1348(b)(6) 63.1349(b)(4)(v) 63.1349(b)(7) 63.1350(i)

No.	Federally Enforceable Conditions for Kiln	Regulations
	with PS8 or PS 8A of appendix B to 40 CFR 60 and comply with all requirements for CEMS found in Subpart A of 40 CFR 63. 1. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4). 2. THC must be measured either upstream of the coal mill or in the coal mill stack. 3. Each CEMS must be operated and maintained according to the quality assurance requirements in Procedure 1 of appendix F to 40 CFR 60. 4. For THC CEMS certified under PS 8A, conduct the relative accuracy test audits (RATA) required under Procedure 1 in accordance with PS 8, Sections 8 and 11 using Method 25A in appendix A to 40 CFR 60 as the reference method. The relative accuracy must meet the criteria of PS 8, Section 13.2. a. For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the reference method is Method 25A of appendix A to 40 CFR 60. 5. Performance testing must be conducted using Method 25A of appendix A to 40 CFR 60 and repeated every 30 months. 6. All quality-assured hourly averaged data collected by the THC CEMS for all operating hours must be used to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day, using Equation 16 of §63.1349(b)(7)(xi). B. **Exceedances.** If the THC level exceeds by 10 percent or more of the site-specific THC emissions limit, the permittee must: 1. As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the THC CEMS measurements to within the established value; and 2. Within 90 days of the exceedance or at the time of the 30 month compliance test, whichever comes first, conduct another performance test to determine compliance with the organic HAP limit and to verify or re-establish the site-specific THC emissions limit. C. **Performance Testing.** 1. Performance tests are required at regular 30-month intervals. Performance tests must be completed no more than 31 calendar months after the previous performance test. 2. The permittee shall conduct total organic HAP emissions testing according to the procedures of §63.1349(b)(7). a. Use Method 320 of appendix A to 40 CFR 63, Method 18 of appendix A to 40 CFR 60, ASTM D6348-03, or a combination thereof. b. The THC CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times the highest THC emissions average determined during the performance test, including mill on or mill off operation. This may require the use of a dual range instrument. c. Each performance test must consist of three separate one-hour runs under the conditions that exist when the kiln is operating at representative performance conditions. d. Separate performance tests must be conducted while the raw mill is on and while the raw mill is off. i. Use the fraction of time the raw mill is on and the fraction of time that the raw mill is off and calculate this limit as a	63.1350(j)

No.	Federally Enforceable Conditions for Kiln	Regulations
	weighted average of the THC levels measured during three raw mill on and three raw mill off tests. e. At the same time the performance test is being conducted, a site-specific THC emissions limit must be determined by operating a THC CEMS in accordance with §63.1350(j). i. The average THC concentration (as calculated from the recorded output) during the 3-hour test must be calculated. ii. Establish the operating limit and determine compliance with it in accordance with §63.1349(b)(7)(iv), (vii), (viii), and (ix), as appropriate, based upon the average organic HAP emissions level determined through the performance test. iii. Use Equation 15 of §63.1349(b)(7)(x) to calculate the operating limit as a weight average of the THC levels measured during raw mill on and raw mill off conditions.	
38.	**Mercury Requirements** A. **Monitoring Requirements.** The permittee shall demonstrate compliance with the mercury emissions limit of Subpart LLL by conducting monitoring according to §63.1350(k), as follows: 1. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4). 2. Mercury must be measured upstream of the coal mill. 3. Install and operate an integrated sorbent trap monitoring system in accordance with PS 12B of appendix B to 40 CFR 60. a. Each integrated sorbent trap monitoring system must be operated and maintained according to the quality assurance requirements in Procedure 5 of appendix F to 40 CFR 60. b. Relative accuracy testing must conducted at normal operating conditions with the raw mill on. c. Use the procedures of §63.1348(a)(5) to assign hourly mercury concentration values and to calculate rolling 30 operating day emissions rates. i. Sorbent trap change periods may be scheduled to any time of the day (i.e., the sorbent trap replacement need not be scheduled at 12:00 midnight nor must the sorbent trap replacements occur only at integral 24-hour intervals). d. During the RATA required under Procedure 5 of appendix F to 40 CFR 60, the permittee may apply the appropriate exception for sorbent trap section 2 breakthrough, as indicated in §63.1350(k)(3)(i) through (iv). e. A monitoring period of at least 24 hours but no longer than 168 hours in length may be used. A monitoring period that is a multiple of 24 hours should be used (except during relative accuracy testing as allowed in PS 12B). B. **Exhaust Gas Flow Rate CMS.** Install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to §63.1350(n)(1) through (10), as follows: a. Install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury CEMS, taking into account the manufacturer's recommendations. i. 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.	63.1348(a)(5) 63.1348(b)(7) 63.1349(b)(5) 63.1350(k) 63.1350(n)

No.	Federally Enforceable Conditions for Kiln	Regulations
	b. 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. c. 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 §63.1350(n)(2). d. 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. e. The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period. f. The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in appendix B to Part 60 of 40 CFR 60 for a discussion of CD). g. 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). h. 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. i. Verify the accuracy of the flow rate monitoring system at least once per year by repeating a relative accuracy test according to Section 8.2 of PS 6 of appendix B to 40 CFR 60, with the following exceptions: i. The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system. ii. The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data. j. 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). C. **Performance Testing.** The Hg emissions rate shall be calculated according to Equation 10 of §63.1349(b)(5)(ii) based on data from a 30-day operating period of the integrated sorbent trap monitoring system and the kiln. 1. Performance tests are required at regular 30-month intervals. Performance tests must be completed no more than 31 calendar months after the previous performance test. 2. Performance testing shall be conducted according to Method 30B of Appendix A of 40 CFR 60.	
39.	**HCl Requirements** A. **Monitoring Requirements.** The permittee shall demonstrate compliance with the HCl emissions limit by using an SO_2 CEMS to establish an	60.63(e) 60.63(f) 63.1348(b)(8)(ii) 63.1348(b)(8)(iii)

No.	Federally Enforceable Conditions for Kiln	Regulations
	operating level during HCl performance tests and monitor SO_2 levels continuously according to §63.1350(l)(3), as follows: 1. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4). 2. The operating limit must be equal to the average recorded during an HCl stack test where the HCl stack test run result demonstrates compliance with the emissions limit. This operating limit will apply only for demonstrating HCl compliance. 3. Monitor SO_2 emissions continuously according to §60.63(e) and (f). 4. Install, operate, and maintain the CEMS according to PS 2 of appendix B to 40 CFR 60. 5. The span value for the SO_2 CEMS monitor is the SO_2 emission concentration that corresponds to 125 percent of the applicable emissions limit at full clinker production capacity and the expected maximum fuel sulfur content. 6. Conduct performance evaluations of each SO_2 CEMS monitor according to the requirements in §60.13(c) and Performance Specification 2 of appendix B to this part. Use Methods 6, 6A, or 6C of appendix A-4 to 40 CFR 60 for conducting the relative accuracy evaluations. The method ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see §60.17) is an acceptable alternative to Method 6 or 6A of appendix A-4 to this part. 7. Comply with the quality assurance requirements in Procedure 1 of appendix F to 40 CFR 60 for the SO_2 CEMS, including quarterly accuracy determinations for monitors, and daily calibration drift tests. 8. Record the SO_2 CEMS output data for all periods when the process is operating and the SO_2 CEMS is not out-of-control. 9. Use all quality-assured hourly average data collected by the SO_2 CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day, using Equation 21 of §63.1349(b)(8)(viii). B. **Exceedances.** If the SO_2 level exceeds by 10 percent or more the site-specific SO_2 emissions limit, the permittee must: 1. As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the SO_2 CEMS measurements to within the established value; and 2. Within 90 days of the exceedance or at the time of the periodic compliance test, whichever comes first, conduct another performance test to determine compliance with the HCl limit and to verify or re-establish the site-specific SO_2 emissions limit. C. **Performance Testing.** 1. Use Method 321 of appendix A to 40 CFR 63 to determine emissions of HCl. 2. Testing must be conducted for raw mill on and mill off conditions. 3. 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. Each run must be conducted for at least one hour. 4. At the same time that the performance test for HCl is being conducted, determine a site-specific SO_2 emissions limit by operating an SO_2 CEMS in accordance with the requirements of §63.1350(l). 5. The average SO_2 concentration (as calculated from the average output) during the 3-hour test must be calculated.	63.1349(b)(6)(iii) 63.1349(b)(8) 63.1349(c) 63.1350(l) 63.1350(m)(9)

No.	Federally Enforceable Conditions for Kiln	Regulations
	6. Establish the SO_2 operating limit and determine compliance with it according to §63.1350(b)(8)(vii) and (viii). 7. Conduct separate performance tests while the raw mill is on and while the raw mill is off. a. Using the fraction of time that the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the SO_2 levels measured during raw mill on and raw mill off compliance testing with Equation 17 of §63.1349(b)(8)(vi). 8. The SO_2 CEMS must be calibrated and operated according to the requirements of §60.63(f). 9. The SO_2 CEMS measurement scale must be capable of reading SO_2 concentrations consistent with the requirements of §60.63(f), including mill on or mill off operation. 10. Performance tests are required at regular 30-month intervals. Performance tests must be completed no more than 31 calendar months after the previous performance test.	

Clinker Cooler Summary Tables

NSR Requirements			
Parameter	**Limit (lb/hr)**	**Control Equipment**	**Monitoring**
PM	8.14	Baghouse	CPMS
PM_{10}	8.14	Baghouse	CPMS

SIP Requirements		
Parameter	**Limit**	**Monitoring**
PM	For process weight rates of less than 30 tons/hour: $E = 3.59\,p^{0.62}$ For process weight rates equal to or greater than 30 tons/hour: $E = 17.31\,p^{0.16}$ Where: E = emission rate in pounds/hour for all similar process units, and p = process weight rate in tons/hour.	CPMS
	0.10 lb/ton kiln feed	
Opacity	20%	Recordkeeping, proper operation and maintenance of filter

40 CFR 63, Subpart LLL Requirements			
Parameter	**Emissions Limit**	**Monitoring Parameter**	**Monitoring Requirements**
PM	0.07 pounds per ton clinker produced	Site-specific Limit	CPMS

Operating Requirements		
Operating Requirement	**Citation**	**Summary**
Startup/Shutdown	· 63.1348(b)(9)	During periods of startup and shutdown, particulate control devices should be operational.
Clinker Production Monitoring	· 63.1348(b)(2) · 63.1350(d)	Determine hourly clinker production by operating permanent weigh scale systems to measure the amount of clinker produced or the amount of feed to the kiln

Federally Enforceable Conditions for Clinker Cooler

Emissions Unit No.	Emissions Unit Description	Control Device
006	Clinker Cooler	95,000 SCFM Baghouse

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
1.	**Applicability** The emissions unit permitted herein is subject to production and emissions limits established pursuant to New Source Review. The emissions unit is also subject to Part 6.1, "Visible Emissions," Part 6.4, "Process Industries – General," and Part 6.10, "Cement Plants," of the Rules and Regulations. 40 CFR 63, Subpart LLL, "National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry," and 40 CFR 60, Subpart F, "Standards of Performance for Portland Cement Plants," also apply.	6.1 6.4 6.10 60.62 63.1340 63.1356
	New Source Review Requirements	
2.	**Clinker Cooler Emissions Limits** The clinker cooler exhaust shall not exceed the following emissions rates: PM: 8.14 lb/hr — Performance testing by EPA Method 5 of 40 CFR 60, Appendix A every 5 years PM_{10}: 8.14 lb/hr — Performance testing by EPA Methods 201A and 202 of 40 CFR 51, Appendix M every 5 years The permittee will also demonstrate compliance by complying with the limits under 40 CFR 63, Subpart LLL.	2.4 14.1.2 18.2.4 18.5.3 4-07-0290-02
3.	**NSR Recordkeeping Requirements** The permittee shall maintain the following records to demonstrate compliance with the applicable requirements: A. Results of performance tests.	1.9 18.5.3
	State Implementation Plan Requirements	
4.	**SIP Applicability** The emissions unit permitted herein is subject to the opacity limit of Part 6.1, and particulate matter emission limits of Part 6.4 and Part 6.10 of the Rules and Regulations.	6.1 6.4 6.10
5.	**Visible Emissions Restriction** The permittee shall not discharge into the atmosphere from any source of emission, particulate of an opacity greater than that designated as twenty percent (20%), as determined by a six (6) minute average. If required by the Department, the opacity shall be determined by EPA Reference Method 9 of appendix A of 40 CFR 60. The permittee may discharge into the atmosphere from a source of emission, particulate of an opacity not greater than that designated as forty percent (40%) opacity during one six (6) minute period in any sixty (60) minute period.	6.1.1 18.5.3
6.	**Particulate Matter Emissions Limit** The permittee shall demonstrate compliance with the particulate matter emissions limits of Parts 6.4 and 6.10 of the Rules and Regulations by complying with the particulate matter emissions limit of 40 CFR 63, Subpart LLL.	6.4 6.10 14.1.2
7.	**SIP Recordkeeping Requirements** The permittee shall maintain, as a minimum, the following records to demonstrate compliance with the applicable requirements and to serve as basis for annual emissions calculations: A. Quantity of clinker through the cooler (tons); and B. Hours of operation of the cooler.	1.5.15 1.9.2 18.5.3

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	40 CFR 60, Subpart F Requirements	
8.	**40 CFR 60, Subpart F Applicability** 40 CFR 60, Subpart F applies to clinker coolers located at Portland Cement plants that commenced construction or modification after August 17, 1971. Pursuant to §60.62(b)(1)(iv), clinker coolers constructed, reconstructed, or modified after August 17, 1971 but on or before June 16, 2008 that use a PM CPMS are not subject to the opacity limit under Subpart F. Pursuant to §60.62(d), sources subject to Subpart F that are in compliance with a more stringent emissions limit or requirement under Title 40 are not subject to the less stringent requirement. The permittee operates a PM CPMS and has demonstrated compliance with the more stringent PM emissions limit of 40 CFR 63, Subpart LLL, and so is no longer subject to the limits under Subpart F.	60.60 60.62(b)(1)(iv) 60.62(d)
	40 CFR 63, Subpart LLL Requirements	
9.	**40 CFR 63, Subpart LLL Applicability** For the emissions unit permitted herein, the affected source under 40 CFR 63, Subpart LLL is each clinker cooler. Table 1 of Subpart LLL provides cross references to the general provisions of 40 CFR 63, Subpart A that apply to affected sources. If the clinker cooler is reconstructed, the emission limits for a new clinker cooler under Subpart LLL will become applicable, performance testing to demonstrate compliance with the new limits, and revision to the Permit would be required. The permittee shall notify the Department prior to any reconstruction, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.	18.2.4 60.14 60.15 63.1340(a) 63.1340(b)(1) 63.1342
10.	**Clinker Cooler Standards** The emissions unit permitted herein is subject to a particulate matter emissions limit of 0.07 pounds per ton clinker produced at all times of operation, except that the work practices of §63.1348(b)(9) apply during periods of startup and shutdown. Particulate control devices must be operational during startup and shutdown.	63.1343(a) 63.1343(b)(1) 63.1348(b)(9)
11.	**Clinker Production Monitoring Requirements** The permittee shall determine the hourly production rate of clinker, according to the requirements of §63.1350(d), as follows: A. Determine hourly clinker production by one of two methods: 1. 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; or 2. 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. a. The system of measuring feed must be maintained within ±5 percent accuracy. b. Calculate the 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. Update this ratio monthly. If this ratio changes at clinker reconciliation, use the new ratio going forward, but it is not required to retroactively change clinker production rates previously estimated. B. Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). 1. During each quarter of source operation, determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).	63.1348(a)(iv) 63.1348(b)(2) 63.1350(d)

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	C. If clinker production is measured directly, record the daily clinker production rates. D. If kiln feed rates are measured and clinker production calculated, record the hourly kiln feed and clinker production rates. E. Develop an emissions monitoring plan in accordance with §63.1350(p)(1) through (4).	
12.	**<u>Particulate Matter Requirements</u>** A. **Monitoring Requirements**. The permittee shall demonstrate continuous compliance with the particulate matter emission standards of Subpart LLL, according to the requirements of §63.1350(b), as follows: 1. The permittee shall use a PM CPMS to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM limit and use the CPMS to demonstrate continuous compliance with this operating limit. a. To determine continuous compliance, PM CPMS output data for all periods when the process is operating and the PM CPMS is not out-of-control must be used. i. All quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day, must be used. Equation 7 of §63.1349(b)(v) shall be used to calculate the 30 operating day rolling average basis. B. **Performance Testing.** Performance testing shall be conducted annually to reassess and adjust the site-specific operating limit in accordance with the test results. 1. Performance testing shall be conducted according to Method 5 or Method 5I of appendix A-3 of 40 CFR 60 and the procedures of §63.1349(b)(1)(i) through (iv). 2. The site-specific operating limit shall be established using the procedures of §63.1349(b)(1)(i) through (iv), as applicable, based upon the PM emissions level determined through the performance test. 3. Performance testing must be repeated if the analytical range of the instrument is changed, if the instrument itself is replaced, or if any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration. 4. An existing operating limit must be verified or a new operating limit established after each repeated performance test. 5. Each performance test shall consist of at least three separate test runs under the conditions that exist when the clinker cooler is operating at the level reasonably expected to occur. a. Each test run shall be conducted to collect a minimum sample volume of 1 dscm. b. The time-weighted average of the results from the three consecutive runs shall be calculated and used to determine compliance. C. **Exceedances.** For any exceedance of the 30-process operating day PM CPMS average value from the established operating limit, the permittee must: 1. Within 48 hours of the exceedance, visually inspect the APCD; 2. If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and 3. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to	63.1348(b)(2) 63.1349(b)(1) 63.1350(b)

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. It is not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under §63.1350(b)(1)(iii). a. PM CPMS exceedances leading to more than four required performance tests in a 12-month process operating period (rolling monthly) constitute a presumptive violation of Subpart LLL.	

Other Sources Subject to Subpart LLL Summary Tables

NSR Requirements			
Parameter	**Limit**	**Control Equipment**	**Monitoring**
PM	See table in Condition No. 2	Fabric Filter	Recordkeeping, proper operation and maintenance of filter
PM_{10}	See table in Condition No. 2	Fabric Filter	Recordkeeping, proper operation and maintenance of filter

SIP Requirements		
Parameter	**Limit**	**Monitoring**
PM	For process weight rates of less than 30 tons/hour: $E = 3.59\ p^{0.62}$ For process weight rates equal to or greater than 30 tons/hour: $E = 17.31\ p^{0.16}$ Where: E = emission rate in pounds/hour for all similar process units, and p = process weight rate in tons/hour.	Recordkeeping, proper operation and maintenance of filter
Opacity	20%	Visible emissions observations

40 CFR 60, Subpart F Requirements			
Parameter	**Emissions Limit**	**Monitoring Parameter**	**Monitoring Requirements**
Opacity	10%	Opacity	Follow the appropriate monitoring procedures of §63.1350(f), (m)(1) through (4), (10) and (11), and (p) of 40 CFR 63, Subpart LLL

40 CFR 63, Subpart LLL Requirements			
Parameter	**Emissions Limit**	**Monitoring Parameter**	**Monitoring Requirements**
Opacity	10%	Opacity	Visible emissions observations

Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL

Emissions Unit No.	Emissions Unit Description	Control Device
Kiln Feed Storage and Handling		
003	Bucket Elevator, Air Slide, Blending Silo, and Raw Material Silos Nos. 1-3	8,700 SCFM Baghouse
004	Air Slide, Weigh Feeder, Scale, and 2 FK Pumps	5,500 SCFM Baghouse
034	Kiln Feed Bucket Elevator, Air Slides (No. 1 Preheater)	6,230 SCFM Baghouse
Clinker Handling		
007	Clinker Pan Conveyor and Clinker Cooler Baghouse Dust Conveyor	2,402 SCFM Baghouse
008	Clinker Withdrawal System, Clinker Storage Silo, and Conveyor Transfer Point	(9) 1,250 SCFM DCE Vokes Baghouses (Clinker Withdrawal System) 12,600 SCFM Baghouse (Clinker Storage Silo and Conveyor Transfer Point)
009	Clinker Feed System, Pan Conveyor, and Bucket Elevator	9,000 SCFM Baghouse
063	Clinker Feed System, Clinker Drag, and Bucket Elevator	1,558 SCFM Baghouse
No. 5, No. 6, & No. 7 Clinker Finish Grinding Ball Mills		
010	Clinker, Gypsum, Anhydrite, and Limestone Conveying Belt Transfer Points and Feed Elevator Serving No. 5 Mill	17,982 SCFM Baghouse
011	No. 5 Finish Mill, Finished Product Elevator, Cement Cooler, Separator, and FK Pump Hopper	20,000 SCFM Baghouse
012	No. 6 Finish Mill, Mill Discharge Elevator, Cyclone, Screw Conveyor, Separator, Mill Feed Elevator, Cement Cooler, FK Pump Hopper, Clinker Belt, and Gypsum Belt Transfer Point	14,545 SCFM Baghouse
013	No. 7 Finish Mill Feed-Belt Conveyor and Feeders	11,522 SCFM Baghouse
014	No. 7 Finish Mill, Bucket Elevator, Material Coolers, FK Pump Hopper	21,942 SCFM Baghouse
Rotary Packing Machine and Cement Transfer System		
015	“B” Silos Cement Transfer System	11,352 SCFM Baghouse
016	Rotary Packer and Masonry Truck/Rail Bulk Loading System	16,000 SCFM Baghouse
017	Burst Bag Trap and Cleaning Station	1,242 SCFM Baghouse
“B” Silo Storage and Loadout		
018	“B” Cement Silos	6,083 SCFM Baghouse (S.W. Baghouse)
019	“B” Cement Silos	6,022 SCFM Baghouse (N.E. Baghouse)
022	“B” Bulk Truck/Rail Loadout Station Bin	3,476 SCFM Baghouse
023	“B” Bulk Truck/Rail Loadout Station Spout	1,200 SCFM Baghouse
“C” Silo Storage and Loadout		
020	“C” Cement Silos	6,083 SCFM Baghouse (S.W. Baghouse)

Emissions Unit No.	Emissions Unit Description	Control Device
021	"C" Cement Silos	6,083 SCFM Baghouse (N.E. Baghouse)
024	North Withdrawal Screw Conveyors from "C" Silos and North Railcar Loadout Station Spout	22,000 SCFM Baghouse
025	Center Withdrawal Screw Conveyors from "C" Silos	14,000 SCFM Baghouse
026	South Withdrawal Screw Conveyors from "C" Silos	14,000 SCFM Baghouse
027	North "C" Truck Loadout Station Silo	3,371 SCFM Baghouse
028	North "C" Truck Loadout Spout	1,200 SCFM Baghouse
029	South "C" Truck Loadout Station Silo (East Side)	1,300 SCFM Baghouse
030	South "C" Truck Loadout Station Silo (West Side)	1,300 SCFM Baghouse
031	South "C" Silos Truck Loadout Station Spout	1,000 SCFM Baghouse
"D" Silo Storage and Loadout		
051	"D" Outer Silo	2,141 SCFM Baghouse
052	"D" Inner Silo	2,141 SCFM Baghouse
053	"D" Central Silo	2,141 SCFM Baghouse
054	"D" Silo Collecting Hopper	2,752 SCFM Baghouse
055	"D" Silo Truck Loading Station No. 1	2,997 SCFM Baghouse
056	"D" Silo Truck Loading Station No. 2	2,997 SCFM Baghouse
057	"D" Silo Rail Car Loading Station	2,997 SCFM Baghouse
058	"D" Silo Truck Loading Spout Station No. 1	1,927 SCFM Baghouse
059	"D" Silo Truck Loading Spout Station No. 2	1,927 SCFM Baghouse
060	"D" Silo Rail Car Loading Spout	533 SCFM Baghouse
061	"D" Outer Silo No. 2	2,141 SCFM Baghouse

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL</th><th>Regulations</th></tr>
<tr><td>1.</td><td><u>Applicability</u>
The emissions units permitted herein are subject to emissions limits established pursuant to New Source Review. The emissions units are also subject to Parts 6.1, “Visible Emissions,” and Part 6.4, “Process Industries – General,” of the Rules and Regulations. 40 CFR 63, Subpart LLL, “National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry,” and 40 CFR 60, Subpart F, “Standards of Performance for Portland Cement Plants,” also apply.</td><td>6.1
6.4
18.2.4
60.60
63.1340</td></tr>
<tr><td colspan="3">New Source Review Requirements</td></tr>
<tr><td>2.</td><td><u>Particulate Matter Emissions Limits</u>
The control equipment for the following emission units shall not exceed the following emission rates, established pursuant to New Source Review.
<table>
<tr><th>Emissions Unit No.</th><th>Air Flow (SCFM)</th><th>PM Emissions Limit (lb/hr)</th><th>PM_{10} Emissions Limits (lb/hr)</th></tr>
<tr><td>003</td><td>8,700</td><td>1.49</td><td>1.27</td></tr>
<tr><td>004</td><td>5,500</td><td>0.42</td><td>0.36</td></tr>
<tr><td>007</td><td>2,402</td><td>0.41</td><td>0.35</td></tr>
<tr><td>008 (Clinker Withdrawal System)</td><td>1,250 per unit</td><td>0.10</td><td>0.08</td></tr>
<tr><td>008 (Clinker Storage Silo and Conveyor Transfer Point)</td><td>12,600</td><td>0.97</td><td>0.83</td></tr>
<tr><td>009</td><td>9,000</td><td>0.69</td><td>0.59</td></tr>
<tr><td>010</td><td>17,982</td><td>1.39</td><td>1.18</td></tr>
<tr><td>011</td><td>20,000</td><td>1.54</td><td>1.31</td></tr>
<tr><td>012</td><td>14,454</td><td>1.11</td><td>0.95</td></tr>
<tr><td>013</td><td>11,522</td><td>0.89</td><td>0.76</td></tr>
<tr><td>014</td><td>21,942</td><td>1.69</td><td>1.44</td></tr>
<tr><td>015</td><td>11,352</td><td>0.88</td><td>0.74</td></tr>
<tr><td>016</td><td>16,000</td><td>1.23</td><td>1.05</td></tr>
<tr><td>017</td><td>1,242</td><td>0.21</td><td>0.18</td></tr>
<tr><td>018</td><td>6,083</td><td>1.04</td><td>0.89</td></tr>
<tr><td>019</td><td>6,022</td><td>1.03</td><td>0.88</td></tr>
<tr><td>020</td><td>6,083</td><td>1.04</td><td>0.89</td></tr>
<tr><td>021</td><td>6,083</td><td>1.04</td><td>0.89</td></tr>
<tr><td>022</td><td>3,476</td><td>0.60</td><td>0.51</td></tr>
<tr><td>023</td><td>1,200</td><td>0.21</td><td>0.18</td></tr>
<tr><td>024</td><td>22,000</td><td>1.70</td><td>1.44</td></tr>
<tr><td>025</td><td>14,000</td><td>1.08</td><td>0.92</td></tr>
<tr><td>026</td><td>14,000</td><td>1.08</td><td>0.92</td></tr>
<tr><td>027</td><td>3,371</td><td>0.58</td><td>0.49</td></tr>
<tr><td>028</td><td>1,200</td><td>0.21</td><td>0.18</td></tr>
<tr><td>029</td><td>1,300</td><td>0.22</td><td>0.19</td></tr>
<tr><td>030</td><td>1,300</td><td>0.22</td><td>0.19</td></tr>
<tr><td>031</td><td>1,000</td><td>0.17</td><td>0.15</td></tr>
<tr><td>034</td><td>6,230</td><td>0.48</td><td>0.41</td></tr>
<tr><td>051</td><td>2,141</td><td>0.17</td><td>0.17</td></tr>
<tr><td>052</td><td>2,141</td><td>0.17</td><td>0.17</td></tr>
<tr><td>053</td><td>2,141</td><td>0.17</td><td>0.17</td></tr>
<tr><td>054</td><td>2,752</td><td>0.21</td><td>0.21</td></tr>
</table></td><td>2.4
18.2.4</td></tr>
</table>

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL</th><th>Regulations</th></tr>
<tr><td></td><td>
<table>
<tr><th>Emissions Unit No.</th><th>Air Flow (SCFM)</th><th>PM Emissions Limit (lb/hr)</th><th>PM_{10} Emissions Limits (lb/hr)</th></tr>
<tr><td>055</td><td>2,997</td><td>0.23</td><td>0.23</td></tr>
<tr><td>056</td><td>2,997</td><td>0.23</td><td>0.23</td></tr>
<tr><td>057</td><td>2,997</td><td>0.23</td><td>0.23</td></tr>
<tr><td>058</td><td>1,927</td><td>0.15</td><td>0.15</td></tr>
<tr><td>059</td><td>1,927</td><td>0.15</td><td>0.15</td></tr>
<tr><td>060</td><td>533</td><td>0.04</td><td>0.04</td></tr>
<tr><td>061</td><td>2,141</td><td>0.17</td><td>0.17</td></tr>
<tr><td>063</td><td>1,558</td><td>0.12</td><td>0.12</td></tr>
</table>
The particulate matter emissions rate shall be as measured by EPA Method 5 of 40 CFR 60, Appendix A. The PM_{10} emissions rate shall be as measured by EPA Methods 201A and 202 of 40 CFR 51, Appendix M.
</td><td></td></tr>
<tr><td colspan="3">State Implementation Plan Requirements</td></tr>
<tr><td>3.</td><td><u>SIP Applicability</u>
The emissions units permitted herein are subject to the opacity limit of Part 6.1 and the particulate matter emissions limit of Part 6.4 of the Rules and Regulations.</td><td>6.1
6.4</td></tr>
<tr><td>4.</td><td><u>Visible Emissions Restriction</u>
The permittee shall demonstrate compliance with the opacity limit of Part 6.1 of the Rules and Regulations by complying with the opacity limit of 40 CFR 60, Subpart F and 40 CFR 63, Subpart LLL.</td><td>6.1
14.1.2</td></tr>
<tr><td>5.</td><td><u>Particulate Matter Emissions Limitations</u>
The permittee shall demonstrate compliance with the particulate matter emissions limit of Part 6.4 of the Rules and Regulations by complying with the particulate matter emissions limits established pursuant to New Source Review for each emissions unit permitted herein.</td><td>6.4
18.2.4</td></tr>
<tr><td>6.</td><td><u>Maintenance of Controls</u>
A. The permittee shall equip each fabric filter particulate matter control device with a pressure differential measuring device to measure the pressure drop across the filter media in the control device. The device shall be installed in a location which is easily accessible for inspection by Department personnel.
B. All air pollution control devices and capture systems for which this permit is issued shall be maintained and operated at all times in accordance with the manufacturer’s specifications or alternative procedures approved by the Department so as to minimize the emissions of air contaminants. Procedures for ensuring that the above equipment is properly operated and maintained so as to minimize the emissions of air contaminants shall be maintained near the source and provided to the Department upon request.
C. The permittee shall conduct routine inspections on all required control equipment. All inspection results and repair work performed on the pollution control device shall be recorded. These records shall be kept in a permanent form suitable for inspection.</td><td>18.2.4
18.5.3(a)(2)</td></tr>
<tr><td>7.</td><td><u>SIP Recordkeeping Requirements</u>
The permittee shall maintain, as a minimum, the following records to demonstrate compliance with the applicable requirements and to serve as basis for emissions calculations:
A. For annual production data reporting and emissions calculations:
1. Quantity (throughput) and type of material stored in each silo (short tons);
2. Quantity (throughput) and type of material stored in open piles (short tons);
3. Quantity (throughput) and type of material conveyed at each controlled transfer point (short tons);</td><td>1.5.15
1.9.2
18.5.3</td></tr>
</table>

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	4. Quantity (throughput) and type of material processed at each finish mill (short tons); 5. Quantity (throughput) and type of material conveyed at each loading or bagging point (short tons); and 6. Hours of operation for each listed emissions unit. B. For demonstrating compliance with the applicable regulations: 1. Records of filter inspections and any resulting repair work.	
	40 CFR 60, Subpart F Requirements	
8.	**40 CFR 60, Subpart F Applicability** For the emissions units permitted herein, the affected sources under Subpart F are finish mill systems, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.	60.60
9.	**Opacity Limit** The emissions units permitted herein are subject to an opacity limit of 10% under Subpart F. Pursuant to §60.64(b)(3), the permittee shall follow the appropriate monitoring procedures of §63.1350(f), (m)(1) through (4), (10) and (11), and (p) of 40 CFR 63, Subpart LLL.	60.62(c) 60.64(b)(3)
	40 CFR 63, Subpart LLL Requirements	
10.	**40 CFR 63, Subpart LLL Applicability** For the emissions units permitted herein, the affected sources under Subpart LLL are the following: · Each finish mill. · Each raw material, clinker, or finished product storage bin. · Each conveying system transfer point including those associated with coal preparation used to convey coal from the mill to the kiln. · Each bagging and bulk loading and unloading system. · Each open clinker storage pile. Table 1 of Subpart LLL provides cross references to the general provisions of 40 CFR 63, Subpart A that apply to affected sources.	63.1340(a) 63.1340(b)(4) 63.1340(b)(6) 63.1340(b)(7) 63.1340(b)(8) 63.1340(b)(9) 63.1342
11.	**Opacity Standards** For the emissions units permitted herein, the permittee shall not cause the discharge of any gases which exhibit opacity in excess of 10%, at all times of operation.	63.1343(a) 63.1343(c) 63.1345
12.	**Monitoring and Testing Requirements** A. **Monitoring Requirements.** The permittee shall demonstrate compliance with the opacity limit of Subpart LLL in accordance with the monitoring requirements of §63.1350(f), based on the maximum 6-minute average opacity exhibited during the performance test period. Monitoring must also be conducted in accordance with the monitoring plan developed under §63.1350(p). 1. Compliance shall be demonstrated using the monitoring methods of §63.1350(f), based on the maximum 6-minute average opacity exhibited during the performance test period. 2. Monitoring shall be conducted according to the monitoring plan developed under §63.1350(p). 3. Corrective actions shall be initiated within one hour of detecting visible emissions above the applicable limit. 4. Visible emissions monitoring shall be conducted, as follows: a. Conduct a monthly 10-minute visible emissions test in accordance with Method 22 of appendix A-7 of 40 CFR 60, while the kiln is in operation. b. If no visible emissions are observed in six consecutive monthly tests, the frequency may be decreased from monthly to semi-annually. If visible emissions are observed during any semi-annual test, monthly	63.1348(b)(3) 63.1349(b)(2) 63.1350(f)

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	testing must be resumed and maintained until no visible emissions are observed in six consecutive monthly tests. c. If no visible emissions are observed during the semi-annual test, the frequency may be decreased from semi-annually to annually. If visible emissions are observed during any annual performance test, monthly testing must be resumed and maintained until no visible emissions are observed in six consecutive monthly tests. d. If visible emissions are observed during any Method 22 performance test, conduct 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9. The Method 9 performance test, must begin within 1 hour of any observation of visible emissions. e. Any totally enclosed conveying system transfer point, regardless of the location of the transfer point is not required to conduct Method 22 visible emissions monitoring. 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. f. If any partially enclosed or unenclosed conveying system transfer point is located in a building, conduct a Method 22 performance test, according to the requirements of §63.1350(f)(1)(i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to §63.1350(f)(1)(vii). g. If visible emissions from a building are monitored, the requirements of §63.1350(f)(1)(i) through (iv) apply to the monitoring of the building. Visible emissions from each side, roof, and vent of the building must also be tested for at least 10 minutes. 5. **Finish Mills Opacity Monitoring.** a. Conduct daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) in accordance with Method 22 for 6 minutes. b. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, conduct a follow-up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. i. Within one-hour of such observations, corrective actions specified in the operating and maintenance plan, as required in §63.1347, must be initiated. c. If visible emissions are observed during the follow-up Method 22 performance test from any stack from which visible emissions were observed during the previous Method 22 performance test, conduct an opacity test of each stack from which emissions were observed during the follow-up Method 22 performance test in accordance with Method 9 for 30 minutes. B. **Performance Testing.** 1. Opacity tests shall be conducted in accordance with Method 9 of appendix A-4 to 40 CFR 60. 2. The test must be 3 hours (30 6-minute averages), except that the duration of the test may be reduced to 1 hour if the following conditions are met: a. There are no individual readings greater than 10% opacity. b. There are no more than three readings of 10% for the first 1-hour period. 3. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating. 4. Performance testing is required for new sources and after major repairs.	

Federally Enforceable Conditions for Emergency Generators

Emissions Unit No.	Emissions Unit Description
062	Emergency Generator: Rotary Kiln Auxiliary Drive Engine –Caterpillar XQ230– 244-hp-Diesel – Installed 2024
064	Emergency Generator: Detroit Diesel – Allison 8V92T – 643-hp – Diesel – Installed 1993

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Emergency Generator</th><th>Regulations</th></tr>
<tr><td>1.</td><td><u>Applicability</u>
The emissions units permitted herein are subject to Parts 6.1, 6.3, and 7.1 of the Rules and Regulations. The emission units are also subject to 40 CFR 60, Subpart IIII, “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,” and 40 CFR 63, Subpart ZZZZ, “National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines,” as indicated in the following table, based on installation date.
<table>
<tr><th>Emissions Unit No.</th><th>40 CFR 60, Subpart IIII</th><th>40 CFR 63, Subpart ZZZZ</th></tr>
<tr><td>062</td><td>Applicable</td><td>Applicable</td></tr>
<tr><td>064</td><td>Not Applicable</td><td>Not Applicable</td></tr>
</table>
Emissions Unit No. 062 shall demonstrate compliance with Subpart ZZZZ by complying with Subpart IIII. Pursuant to §63.6590(b)(3)(iii), Emissions Unit No. 064 does not have to meet the requirements of Subpart ZZZZ or of 40 CFR 63, Subpart A. The reconstruction or modification of Emissions Unit No. 064 could subject it to additional requirements under Subpart IIII and/or Subpart ZZZ. The permittee shall notify the Department prior to any reconstruction, identifying any applicable requirements which are triggered by the change to allow the Department to determine if reopening and revision of the permit is required. No permit shield will apply for requirements triggered by modification or reconstruction.</td><td>6.1
6.3
7.1
60.14
60.15
60.4200(a)
63.2
63.6590(a)(1)(i)
63.6590(b)(3)(iii)
63.6590(c)(6)</td></tr>
<tr><td>2.</td><td><u>Visible Emissions</u>
The permittee shall not discharge into the atmosphere from any source of emission any air contaminant with an opacity greater than 20%, as determined by a 6-minute average using EPA Method 9 of 40 CFR 60, Appendix A, except that during (1) 6-minute period in any 60-minute period, particulate emissions from a source of emission may reach but not exceed 40% opacity.</td><td>6.1.1
6.1.2</td></tr>
<tr><td>3.</td><td><u>Visible Emissions Observations</u>
If the period of operation of an engine exceeds the time needed to startup the engine and achieve safe loading and normal operation (a maximum of 30 minutes), the exhaust shall be visually observed for the presence of visible emissions. It is not necessary to quantify the opacity of the visible emissions during normal operation if the cause of any amount of visible emissions is promptly investigated and corrected. The effectiveness of corrective actions shall be demonstrated by follow-up a visual observation at the completion of repairs and not later than the next operation of the engine. If visible emissions are not corrected, a certified observer shall complete a Visible Emissions Evaluation consistent with EPA Method 9 of 40 CFR 60, Appendix A, within 3 working days to establish compliance with Section 6.1.1.</td><td>18.5.3</td></tr>
</table>

No.	Federally Enforceable Conditions for Emergency Generator	Regulations
4.	**Fuel Restriction** The permittee shall combust only diesel fuel in each compression ignition (CI) engine. Compliance with this provision will serve to demonstrate compliance with the applicable requirements for fuel combustion emissions at Sections 6.3 (particulate matter) and 7.1 (sulfur dioxide) of the Rules and Regulations. Compliance shall be demonstrated by fuel records. For engines subject to Subpart IIII, diesel fuel must conform to the requirements of 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased prior to October 1, 2010 may be used until depleted.	6.3 7.1 18.2.4 18.5.3 60.4207(b)
5.	**Restrictions on Non-Emergency Use** There is no time limit on the use of an emergency engine in emergency situations. The permittee must comply with the following restrictions on non-emergency use, for the emissions units to be considered emergency engines: A. Operation for maintenance checks and readiness testing is allowed for up to 100 hours per calendar year as specified in §60.4211(f)(2)(i); and B. Operation for non-emergency situations is limited to 50 hours per calendar year. Any operation for non-emergency operation shall also count toward that 100 hours per year allowed for maintenance checks and readiness testing. Any operation for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity, unless all the following conditions are met: 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region; 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission, or local standards or guidelines; 4. The power is provided only to the facility itself or to support the local transmission and distribution system; 5. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator. Any engine that does not comply with the non-emergency use restriction must comply with the requirements for non-emergency engines under the applicable subpart(s).	18.2.4 60.4211(f) 60.4219
6.	**Non-Resettable Hour Meter** For each emergency engine, the permittee shall install a non-resettable hour meter, and, for each instance of engine operation, record the time (duration) of engine operation and the reason the engine was in operation at that time.	18.2.4 60.4209(a) 60.4214(b)
7.	**Requirements for 40 CFR 60, Subpart IIII** A. The engine is required to be certified by the manufacturer to the Tier 2 or Tier 3 emissions standards for new, nonroad CI engines for the same rated power as described in 40 CFR 1039, appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105 for the same model year and maximum engine power. The engine shall be installed and configured according to the manufacturer's emission-related written specifications for the entire life of the engine;	60.4202(a)(2) 60.4205(b) 60.4206 60.4209(b) 60.4211(g)(2)

No.	Federally Enforceable Conditions for Emergency Generator	Regulations
	B. If the engine is equipped with a diesel particulate filter, a backpressure monitor must be installed that notifies the permittee when the high backpressure limit of the engine is approached; C. Install, configure, operate, and maintain each engine and control device according to the manufacturer's emission-related written instructions; change only those emission-related settings that are permitted by the manufacturer; and meet the requirements of 40 CFR 1068 as they apply; D. If the engine has not been installed, configured, operated, and maintained according to the manufacturer's emission-related instructions, or if any emission-related settings are changed in a way that is not permitted by the manufacturer: 1. Keep a maintenance plan and records of conducted maintenance; 2. To the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions; and 3. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the emission-related settings have been changed in a way that is not permitted by the manufacturer. Performance testing (if required) shall be performed according to the requirements of 40 CFR §§60.4212(a)-(e) and 60.8. A copy of each performance test shall be submitted to the Department within 60 days after the test has been completed.	
8.	**Recordkeeping Requirements for 40 CFR 60, Subpart IIII** A. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must also record the time of operation of the engine and the reason the engine was in operating during that time. B. If a diesel particulate filter is equipped, the permittee shall keep records of any corrective action taken after the backpressure monitor has notified the operator that the high backpressure limit of the engine is approached.	60.4214(b) 60.4214(c)
9.	**SIP Recordkeeping Requirements** The permittee shall maintain, as a minimum, the following records to demonstrate compliance with the applicable requirements and to serve as basis for emissions calculations: A. For annual production data reporting and emissions calculations: 1. Hours of operation for the engine; 2. Type and quantity of fuel used in gallons per year. B. For demonstrating compliance with the applicable requirements: 1. Records of the purpose of each operation of each engine to demonstrate compliance with the restrictions on use other than for emergency operation; 2. Records to document the type of fuel used and the sulfur content of fuel used by each engine; 3. Time, date and duration of malfunctions, including whether the equipment the control device is intended to control was operating and any corrective actions taken; 4. Time, date, total engine hours operated, and name of person(s) performing each inspection;	1.5.15 1.9 18.5.3

No.	Federally Enforceable Conditions for Emergency Generator	Regulations
	5. Time, date, name of observer for visible emissions observations; 6. Time, date, total engine hours operated, and name of person(s) performing maintenance, corrective actions and repairs; and 7. If the hours of operation for any engine exceed 50 hours for the previous calendar year, include the number of hours spent for non-emergency operation.	

Appendix A: Cross-References Table: JCBH Air Pollution Control Rules and Regulations to State Implementation Plan

The citations to Alabama regulations provided below refer to the version of the regulation that has been approved by the U.S. EPA as part of Alabama's Clean Air Act state implementation plan (SIP), as identified in 40 CFR 52, Subpart B. In the event that there is a discrepancy between the information provided in the table below and the federal regulatory table identifying the Alabama SIP at 40 CFR 52, Subpart B, the federal regulatory table governs.

JCDH Citation	State Citation	Title/Subject
	Chapter No. 335-1-1	**Organization**
No equivalent provision	Section 335-1-1-.03[1]	Organization and Duties of the Commission
No equivalent provision	Section 335-1-1-.04	Organization of the Department
Chapter 1	**Chapter No. 335-3-1**	**General Provisions**
Part 1.1	Section 335-3-1-.01	Purpose
Part 1.3	Section 335-3-1-.02	Definitions
Part 1.7	Section 335-3-1-.03	Ambient Air Quality Standards
Part 1.9	Section 335-3-1-.04	Monitoring, Records, and Reporting
Part 1.10	Section 335-3-1-.05	Sampling and Test Methods
Part 1.11	Section 335-3-1-.06	Compliance Schedule
Part 1.12	Section 335-3-1-.07	Maintenance and Malfunctioning of Equipment; Reporting
Part 1.13	Section 335-3-1-.08	Prohibition of Air Pollution
Sections 3.2.1 – 3.2.4 & Part 3.4	Section 335-3-1-.09	Variances
Part 1.15	Section 335-3-1-.10	Circumvention
Part 1.16	Section 335-3-1-.11	Severability
Part 1.17	Section 335-3-1-.12	Bubble Provision
Part 1.18	Section 335-3-1-.13	Credible Evidence
Part 1.20	Section 335-3-1-.15	Emissions Inventory Reporting Requirements
Chapter 2	**Chapter No. 335-3-14**	**Air Permits**
Part 2.1	Section 335-3-14-.01	General Provisions
Part 2.2, except 2.2.4(h)	Section 335-3-14-.02[2]	Permit Procedures
Part 2.3	Section 335-3-14-.03	Standards for Granting Permits
Part 2.4	Section 335-3-14-.04[3],[4],[5]	Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration (PSD)]
Part 2.5	Section 335-3-14-.05[6]	Air Permits Authorizing Construction in or Near Nonattainment Areas
Chapter 4	**Chapter No. 335-3-2**	**Air Pollution Emergency**
Part 4.1	Section 335-3-2-.01	Air Pollution Emergency
Part 4.3	Section 335-3-2-.02	Episode Criteria
Part 4.4	Section 335-3-2-.03	Special Episode Criteria
Part 4.5	Section 335-3-2-.04	Emission Reduction Plans
Part 4.6	Section 335-3-2-.05	Two Contaminant Episode
Part 4.7	Section 335-3-2-.06	General Episodes
Part 4.8	Section 335-3-2-.07	Local Episodes

[1] ADEM amendments effective on December 7, 2018 have not been approved in the SIP by EPA.
[2] ADEM amendments effective on September 7, 2000 and July 11, 2006 have not been approved in the SIP by EPA.
[3] Exceptions to approval as of October 2, 2025: Except for changes to 335-3-14-.04(2)(w)1., state effective July 11, 2006, which lists a 100 ton per year significant net emissions increase for regulated NSR pollutants not otherwise specified at 335-3-14-.04(2)(w).
[4] Exceptions to approval as of October 2, 2025: Except for the significant impact levels at 335-3-14-.04(10)(b).
[5] Exceptions to approval as of October 2, 2025: Except for the second and third sentences of paragraph 335-3-14-.04(2)(bbb)2., as well as the second and fourth sentences of paragraph 335-3-14-.04(2)(bbb)3., which include changes from the vacated federal ERP rule.
[6] Exceptions to approval as of October 2, 2025: Except for the portion of 335–3–14–.05(1)(k)20 stating ''excluding ethanol production facilities that produce ethanol by natural fermentation''; and 335–3–14–.05(2)(c)3 (addressing fugitive emission increases and decreases). Except for 335–3–14–.05(1)(h) (the actual-to-potential test for projects that only involve existing emissions units); the last sentence at 335–3–14–.05(3)(g), stating ''Interpollutant offsets shall be determined based upon the following ratios''; and the NNSR interpollutant ratios at 335–3–14–.05(3)(g)1–4.

JCDH Citation	State Citation	Title/Subject
Part 4.9	Section 335-3-2-.08	Other Sources
Section 4.2.3	Section 335-3-2-.09	Other Authority Not Affected
Chapter 5	**Chapter No. 335-3-3**	**Control of Open Burning and Incineration**
Sections 5.1.1 – 5.1.5[1]	Section 335-3-3-.01	Open Burning
Part 5.2	Section 335-3-3-.02[2]	Incinerators
Part 5.3[3], except 5.3.4	Section 335-3-3-.03	Incineration of Wood, Peanut, and Cotton Ginning Waste
Chapter 6	**Chapter No. 335-3-4**	**Control of Particulate Emissions**
Part 6.1[4]	Section 335-3-4-.01	Visible Emissions
Part 6.2	Section 335-3-4-.02[5]	Fugitive Dust and Fugitive Emissions
Part 6.3	Section 335-3-4-.03	Fuel Burning Equipment
Part 6.4	Section 335-3-4-.04	Process Industries—General
Part 6.5[6]	Section 335-3-4-.05	Small Foundry Cupola
Part 6.6[7]	Section 335-3-4-.06	Cotton Gins
Part 6.7	Section 335-3-4-.07	Kraft Pulp Mills
Part 6.8	Section 335-3-4-.08	Wood Waste Boilers
Part 6.9	Section 335-3-4-.09	Coke Ovens
No equivalent provision	Section 335-3-4-.10	Primary Aluminum Plants
Part 6.10	Section 335-3-4-.11	Cement Plants
Part 6.12	Section 335-3-4-.12	Xylene Oxidation Process
No equivalent provision	Section 335-3-4-.13[8]	Sintering Plants
No equivalent provision	Section 335-3-4-.14	Grain Elevators
No equivalent provision	Section 335-3-4-.15	Secondary Lead Smelters
No equivalent provision	Section 335-3-4-.17	Steel Mills Located in Etowah County
Chapter 7	**Chapter No. 335-3-5**	**Control of Sulfur Compound Emissions**
Part 7.1	Section 335-3-5-.01	Fuel Combustions
Part 7.2 is not equivalent	Section 335-3-5-.02	Sulfuric Acid Plants
No equivalent provision	Section 335-3-5-.03	Petroleum Production
No equivalent provision	Section 335-3-5-.04	Kraft Pulp Mills
No equivalent provision	Section 335-3-5-.05	Process Industries—General
Part 7.6	Sections 335-3-5-.06 through 335-3-5-.36	TR SO_2 Trading Program
Chapter 8	**Chapter No. 335-3-6**	**Control of Organic Emissions**
Part 8.1[9]	Section 335-3-6-.24	Applicability
Part 8.2	Section 335-3-6-.25	VOC Water Separation
Part 8.3	Section 335-3-6-.26[10],	Loading and Storage of VOC
Part 8.4	Section 335-3-6-.27	Fixed-Roof Petroleum Liquid Storage Vessels
Part 8.5	Section 335-3-6-.28	Bulk Gasoline Plants
Part 8.6	Section 335-3-6-.29	Gasoline Terminals

[1] See also Guidelines & Standard Operating Procedures for Issuance of Open Burning Authorizations at the end of Chapter 5. ADEM 335-3-3-.01(2)(b)(6) also prohibits open burning during declared air stagnation advisories and drought emergencies.
[2] Amendments to 335-3-3-.02 effective September 19, 1991 have not been approved into the SIP by EPA.
[3] JCDH has no equivalent for ADEM 335-3-3-.03(5), which states "Each incinerator subject to this Rule shall be properly designed, equipped, and maintained for its maximum rated burning capacity and shall be equipped with an underfire forced air system, an over-fire air recirculation secondary construction system, and variable control damper, all of which shall be electronically controlled to insure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator. Each such incinerator shall be equipped with a temperature recorder which shall be operated continuously with the incinerator, and the temperature records shall be made available for inspection at the request of the Director."
[4] ADEM has no equivalent to Section 6.1.8.
[5] ADEM 335-3-4-.02(4) was removed effective July 15, 1999, however, the provision is still included in the EPA-approved SIP.
[6] All allowable emissions rates in Table 6-3 should be construed to have 2 significant figures, consistent with ADEM 335-3-4-.05, Table 4-3.
[7] All allowable emissions rates in Table 6-4 should be construed to have 1 significant figure, consistent with ADEM 335-3-4-.06, Table 4-4.
[8] ADEM has removed and reserved this section, however it remains listed in the EPA approved SIP. See 40 CFR 52.50(c).
[9] The definition of "low-use coating" at ADEM 335-3-6-.24(2)(d) is located at JCDH Part 1.3.
[10] Amendments to 335-3-6-.26 effective September 21, 1989 and July 31, 1991 have not been approved into the SIP by EPA. The EPA-approved SIP requires a disposal system in conjunction with equipment required by ADEM 335-3-6-.26(2)(c)1.(i) (JCDH 8.3.2(c)(1)(i)).

JCDH Citation	State Citation	Title/Subject
Part 8.7, except 8.7.4(b) & 8.7.5(e)	Section 335-3-6-.30	Gasoline Dispensing Facilities Stage 1
No equivalent provision	Section 335-3-6-.31[1]	Petroleum Refinery Sources
Part 8.11	Section 335-3-6-.32	Surface Coating
Part 8.12	Section 335-3-6-.33	Solvent Metal Cleaning
Part 8.13	Section 335-3-6-.34	Cutback and Emulsified Asphalt
No equivalent provision	Section 335-3-6-.35[2]	Petition for Alternative Controls
Part 8.15	Section 335-3-6-.36	Compliances Schedules
Part 8.16[3]	Section 335-3-6-.37	Test Methods and Procedures
No equivalent provision	Section 335-3-6-.38	Reserved
Part 8.18	Section 335-3-6-.39	Manufacture of Synthesized Pharmaceutical Products
Part 8.20, except 8.20.8	Section 335-3-6-.41	Leaks from Gasoline Tank Trucks and Vapor Collection Systems
No equivalent provision	Section 335.3.6-.42	Reserved
Part 8.22	Section 335-3-6-.43	Graphic Arts
Part 8.23	Section 335-3-6-.44	Petroleum Liquid Storage in External Floating Roof Tanks
Part 8.24	Section 335-3-6-.45	Large Petroleum Dry Cleaners
No equivalent provision	Section 335-3-6-.46	Reserved
Part 8.26	Section 335-3-6-.47	Leaks from Coke by-Product Recovery Plant Equipment
Part 8.27	Section 335-3-6-.48	Emissions from Coke by-Product Recovery Plant Coke Oven Gas Bleeder
Part 8.28	Section 335-3-6-.49	Manufacture of Laminated Countertops
Part 8.29	Section 335-3-6-.50	Paint Manufacture
Part 8.23[4]	Section 335-3-6-.53	List of EPA Approved and Equivalent Test Methods and Procedures for the Purpose of Determining VOC Emissions
Chapter 9	**Chapter No. 335-3-7**	**Control of Carbon Monoxide Emissions**
Part 9.1	Section 335-3-7-.01	Metals Productions
Part 9.2	Section 335-3-7-.02	Petroleum Processes
Chapter 10	**Chapter No. 335-3-8**	**Control of Nitrogen Oxides Emissions**
Part 10.1	Section 335-3-8-.01	Standards for Portland Cement Kilns
Part 10.2	Section 335-3-8-.02	Nitric Acid Manufacturing
Part 10.3	Section 335-3-8-.03	NO_X Emissions from Electric Utility Generating Units
Part 10.4	Section 335-3-8-.04	Standards for Stationary Reciprocating Internal Combustion Engines
Part 10.5	Section 335-3-8-.05	New Combustion Sources
Part 10.7	Sections 335-3-8-.07 through 335-3-8-.38	TR NO_X Annual Trading Program
Part 10.8	Sections 335-3-8-.39 through 335-3-8-.70	TR NO_X Ozone Season Trading Program
Part 10.9	Sections 335-3-8-.71 & 335-3-8-.72	NO_X Budget Program
Chapter 11	**Chapter No. 335-3-9**	**Control of Emissions from Motor Vehicles**
Part 11.1	Section 335-3-9-.01	Visible Emission Restriction for Motor Vehicles
Part 11.2	Section 335-3-9-.02	Ignition System and Engine Speed
Part 11.3	Section 335-3-9-.03	Crankcase Ventilation Systems
Part 11.4	Section 335-3-9-.04	Exhaust Emission Control Systems
Part 11.5	Section 335-3-9-.05	Evaporative Loss Control Systems

[1] ADEM has removed and reserved this section, however it remains listed in the EPA approved SIP. See 40 CFR 52.50(c).

[2] Amendments to 335-3-6-.35 effective July 31, 1991 have not been approved into the SIP by EPA.

[3] Federally enforceable testing provisions for perchloroethylene dry cleaning systems are located at ADEM 335-3-6-.37(5) and federally enforceable testing provisions for capture efficiency for VOC capture and control systems are located at ADEM 335-3-6-.37(13). JCDH 8.16.5 is reserved, and JCDH 8.16.13 is very brief.

[4] Test Methods 204, 204A-204F are not included in the EPA-approved SIP.

JCDH Citation	State Citation	Title/Subject
Part 11.6	Section 335-3-9-.06	Other Prohibited Acts
Part 11.7	Section 335-3-9-.07	Effective Date
No equivalent provision	**Chapter No. 335-3-12**[1]	Continuous Monitoring Requirements for Existing Sources
No equivalent provision	**Chapter No. 335-3-13**	Control of Fluoride Emissions
Chapter 17	**Chapter No. 335-3-15**	**Synthetic Minor Operating Permits**
Part 17.1	Section 335-3-15-.01[2]	Definitions
Part 17.2, except 17.2.8(h)(7)	Section 335-3-15-.02	General Provisions
Part 17.3	Section 335-3-15-.03	Applicability
Part 17.4[3]	Section 335-3-15-.04	Synthetic Minor Operating Permit Requirements
Part 17.5, except 17.5.2	Section 335-3-15-.05	Public Participation
Chapter 19	**Chapter No. 335-3-17**	**Conformity of Federal Actions to State Implementation Plans**
Part 19.1	Section 335-3-17-.01	Transportation Conformity
Part 19.2	Section 335-3-17-.02	General Conformity

[1] Amendments to 335-3-12-.02 effective September 7, 2000 have not been approved into the SIP by EPA.
[2] Amendments to 335-3-15-.01 effective January 16, 1997 have not been approved into the SIP by EPA. Only the first sentence of ADEM 335-3-15-.01(g) is approved into the SIP. JCDH does not include the unapproved language.
[3] The federally enforceable provisions of ADEM 335-3-15-.04(3)(c) are located at JCDH 2.1.7(a).