JEFFERSON COUNTY DEPARTMENT OF HEALTH

AIR POLLUTION PROGRAM

TITLE V OPERATING PERMIT

Permittee:	**Lehigh Hanson Cement South LLC**
Location:	**8401 Second Avenue** **Leeds, Alabama 35094**
Permit No:	**4-07-0290-06**
Issuance Date:	**December 31, 2020**
Expiration Date:	**December 30, 2025**
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	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	Emergency Generator

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.

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: Mark Wilson, M.D.
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. "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. "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. "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." "CAM" is an acronym for compliance assurance monitoring. "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.	1.3 8.26.1 8.27.1 18.7.1 60.2 60.41b 61.02 61.131 61.241 61.341 63.1 63.301 63.7352 63.6674

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	"CEMS" is an acronym for continuous emissions monitoring system. "CKD" is an acronym for clinker kiln dust. "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. "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* "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. "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. "Deviation" means any instance in which an affected source subject to 40 CFR 63, Subpart ZZZZ, or an owner or operator of such a source: (1) Fails to meet any requirement or obligation established by Subpart ZZZZ, including but not limited to any emission limitation or operating limitation; (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in Subpart ZZZZ and that is included in the operating permit for any affected source required to obtain such a permit; or (3) Fails to meet any emission limitation or operating limitation in Subpart ZZZZ during malfunction, regardless of whether or not such failure is permitted by	

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	Subpart ZZZZ. (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i). *40 CFR 63, Subpart ZZZZ* Dioxins and furans (D/F) meanstetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans. *40 CFR 63, Subpart LLL* "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God. These are situations that require immediate corrective actions(s) to restore normal operation, and that cause the facility to exceed a technology based emission limitation set by the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. "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. 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). 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. For purposes of this part, 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* "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*	

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	"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* "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. *40 CFR 63, Subpart A* "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: (a) Routine maintenance, repair, and replacement shall not be considered physical changes, and (b) The following shall not be considered a change in the method of operation: (1) An increase in the production rate; (2) An increase in hours of operation; (3) 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. 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. 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. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous	

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	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. 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. (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. 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 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 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*	

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	"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. "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. "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. 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. 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. 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	

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	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. "SNCR" is an acronym for selective non-catalytic reduction. "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* "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 this subpart, the sum of the concentrations of compounds of formaldehyde, benzene, toluene, styrene, m-xylene, p-	

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	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. 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. 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. 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) of this part. When using ASTM D6348-03, the following conditions must be met: (1) The test plan preparation and implementation in the Annexes to ASTM D6348-03, Sections A1 through A8 are mandatory; (2) For ASTM D6348-03 Annex A5 (Analyte Spiking Technique), the percent R must be determined for each target analyte (see Equation A5.5); (3) For the ASTM D6348-03 test data to be acceptable for a target analyte percent R must be 70 percent $\geq R \leq 130$ percent; and (4) 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 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 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 769

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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)
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.	18.2.4 18.5.3(a)(2)

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	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.	
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
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	18.2.8(e)

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	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.	
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: 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.	18.13.5
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	18.5.10 70.6(a)(6)(v)

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	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.	
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; 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	18.13.3

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	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. 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.	18.14
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)

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34.	**Emergency Provision** A. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emissions limitation under the Operating Permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. B. Exceedances of emission limits during emergencies (as defined above) at a facility may be exempted from being violations provided that: 1. The permittee demonstrates that the event qualifies as an emergency as defined above; 2. The permittee can identify the cause(s) of the emergency; 3. At the time of the emergency, the permitted facility was being properly operated; 4. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; 5. The permittee submitted notice of the emergency to the Health Department within 2 working days of the time when emission limitations were exceeded due to the emergency, including those deviations attributable to upset conditions as defined in the permit, the probable cause of said deviations, and any corrective actions or preventive measures that were taken; 6. The permittee submitted a written documentation of what was reported in the notice of the emergency to the Department within 5 working days of the emergency with a certification signed by a responsible official consistent with Section 18.4.9 of the regulations; and 7. The permittee immediately documented the emergency exceedance in an "Emergency Log", which shall be maintained for 5 years in a form suitable for inspection upon request by a representative of the Department. This provision is in addition to any emergency or upset provision contained in any applicable requirement. The permittee has the burden of proof to assert and establish that excess emissions were attributable to an emergency in any enforcement proceeding.	18.11.2 18.7.1
35.	**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
36.	**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

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37.	**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)
38.	**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
39.	**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
40.	**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)

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41.	**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	
42.	**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 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: 1. Use of vacuum truck, street sweeper or water truck on paved surfaces; 2. 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; 3. Maintain existing roof/cover over material conveyors; 4. 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 5. 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.	6.2.1 6.2.2 6.2.3 6.9.2 18.2.4

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43.	**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. The PM emission limits of 40 CFR 60, Subpart F no longer apply to the permittee's affected sources that have demonstrated compliance with the more stringent emission limits of 40 CFR 63, Subpart LLL. B. 40 CFR 60, Subpart OOO does not apply to the permittee because the potentially affected equipment was constructed prior to August 31, 1983. C. 40 CFR 60, Subpart IIII does not apply because the emergency engine was constructed prior to July 11, 2005. 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.	18.10
	Recordkeeping, Reports and Notifications for Entire Facility	
44.	**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 18.7.1 70.6(a)(3)(C)
45.	**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	18.7.1 18.4.9 18.7.5(d)

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	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	
	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: TSP, 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 4 for the Quarry Operations; 2. Condition 36 for the Kiln; 3. Condition 19 for the Clinker Cooler; 4. Condition 18 for Other Sources Subject to Subpart LLL; and 5. Condition 7 for Emergency Generators. 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.	1.9.2 1.5.15 18.7.1 18.7.5

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	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 beginning with emissions year 2004: 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 beginning with emissions year 2005: 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.	10.1.6 10.1.4(b)
	D. **Annual Ozone Season Reporting to JCDH,** Within 30 days of the end of each Ozone Season (May 1st – September 30th), the permittee shall report to the Permitting Authority 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 Title V Certification, 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, the information and/or reports listed in the emission unit conditions at the following locations: 1. Condition 34 for the Kiln; 2. Condition 18 for the Clinker Cooler; and 3. Condition 17 for Other Sources Subject to Subpart LLL..	1.9.2 1.5.15 18.5.3(c)(1) 18.2.4 18.7.1 63.1354(b)
	F. **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)
	G. **Results of performance testing and CMS performance evaluations** within 30 days after completion.	1.9.2 18.7.1 63.1354(b)(6)
	H. **Episodic prompt reporting of malfunctions, deviations, emergencies and violations** of any permit condition, including but not limited to emission limitations, within 2 working days of the malfunction, deviation, emergency 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.	1.12.2 18.5.3(c)(2) 63.10(d)(5)(ii)
	I. **Notifications** as follows: 1. Notification of performance testing as required by §63.7 and §63.9(e). 2. Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f). 3. 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. 4. 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.	63.1353(b)

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	5. 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).	63.9(j)
	6. 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
	J. **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

<table>
<tr><th>No.</th><th>Federally Enforceable Conditions for Quarry Operations</th><th>Regulations</th></tr>
<tr><td>1.</td><td><u>Emission Limitations for Quarry Equipment from the State Implementation Plan (SIP)</u>
The permittee shall not cause or allow emissions from this emission unit in excess of the emission limits below:
<table><tr><th>Pollutant</th><th>Limit</th><th>Authority</th></tr><tr><td>Particulate Matter (PM)</td><td>$E = 3.59p^{0.62}$, 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</td><td>6.4.1</td></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></table></td><td>6.4.1
6.1.1</td></tr>
<tr><td>2.</td><td><u>Fugitive Particulate Matter</u>
To prevent fugitive particulate emissions as required by General Condition 42, the permittee shall use a wet suppression system for the listed emissions units. The work practice plan described in General Condition 42 shall be kept on-site and shall be implemented to prevent excessive fugitive dust.</td><td>18.5.3
18.7.1
6.2</td></tr>
<tr><td>3.</td><td><u>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 in Condition 1.
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
18.7.1
6.1.1
6.1.2</td></tr>
<tr><td>4.</td><td><u>Annual Emissions Reporting (JCDH Requirement)</u>
The permittee shall maintain the records required by Conditions 2 and 3 above and include the following information for each crusher in the annual emissions report as the basis for emissions calculations:
A. The quantity of rock blasted and rock loaded (short tons);
B. The quantity of material processed in each crusher; and.
C. The hours of operation for blasting, loading and each crusher for the previous calendar year.</td><td>1.5.15
18.5.3
1.9.2
18.7.1</td></tr>
</table>

SUMMARY TABLES FOR PORTLAND CEMENT MANUFACTURING

Affected Sources Under Subpart LLL (NESHAP) and Subpart F (NSPS)	Citation
Rotary Kiln (including inline coal mill) Clinker Cooler Raw & Finish Mills Raw Material, Clinker, & Finished Product Storage Bins Each Conveying System Transfer Point (including those associated with coal preparation used to convey coal from the mill to the kiln) Bagging and Bulk Loading and Unloading Systems Open Clinker Storage Piles (Subpart LLL only)	40 CFR §63.1340(b)) & 40 CFR §60.60

Pollutant	Applicable Kiln Emission Limits	Citation
Particulate Matter	0.07 lb/ton clinker	40 CFR §63.1343(b)
Dioxin/Furans (D/F)	0.2 ng/dscm (TEQ), corrected to 7% oxygen[1]	40 CFR §63.1343(b)
Mercury	55 lb/million tons of clinker	40 CFR §63.1343(b)
Total Hydrocarbons (THC)	24 ppmvd for THC, measured as propane & corrected to 7% oxygen *or* 12 ppmvd for total organic HAP & corrected to 7% oxygen	40 CFR §63.1343(b)
Hydrochloric Acid	3 ppmvd, corrected to 7% oxygen	40 CFR §63.1343(b)
Opacity	20% as determined by a 6-minute average using by EPA Method 9, except as allowed by 6.1.1(b)	Part 6.1
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.	Part 6.4
PM & PM_{10}	19.27 lb/hr measured by EPA Method 5 for PM and EPA Methods 201A and 202 for PM_{10}	NSR Avoidance, 18.2.4, & 4-07-0290-02

[1] *or* 0.40 ng of D/F per dscm (TEQ) (fabric filter inlet <400°F)

Pollutant	Applicable Kiln Emission Limits (Continued)	Citation
VOC	17.24 lb/hr as a 30-day rolling average	NSR Avoidance, 18.2.4, & 4-07-0290-02
NO_X	625.89 lb/hr as a 30-day rolling average	NSR Avoidance, 18.2.4, & 4-07-0290-02
SO_2	102.30 lb/hr as a 30-day rolling average	NSR Avoidance, 18.2.4, & 4-07-0290-02
CO	524.82 lb/hr as a 30-day rolling average	NSR Avoidance & 18.2.4
Startup & Shutdown	Use only clean fuels listed at §63.1346(g)(1) may be combusted until the kiln reaches 1200 °F, at which temperature combustion of the primary kiln fuel may begin.	40 CFR §63.1346(g)

Pollutant or Equipment	Compliance Requirements for Kiln	Citation
Particulate Matter	Demonstrate continuous compliance using a PM CPMS. Conduct a performance test annually and reassess and adjust the site-specific operating limit in accordance with the results.	40 CFR §63.1349(b)(1)
Dioxin/Furans (D/F)	Operate the kiln such that the temperature of the gas at the inlet to the baghouse does not exceed temperature limit established during performance testing (repeated at 30 month intervals), except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10%. The temperature limit is determined in accordance with 40 CFR §63.1349(b)(3)(iv).	40 CFR §63.1346(a), §63.1346(b) & §63.1349(c)
Mercury	Demonstrate continuous compliance using a mercury sorbent trap monitoring system and an instrument to measure gas flow rate. Conduct an annual mercury performance test.	40 CFR §63.1349(b)(5)
Total Hydrocarbons (THC)	Demonstrate continuous compliance using a THC CEMS or conduct performance tests every 30 months to measure Total Organic HAP and establish a site-specific operating limit for a THC CEMS.	40 CFR §63.1349(b)(4) & §63.1349(c)
Hydrochloric Acid	Demonstrate continuous compliance using an SO_2 CEMS. Establish a site-specific operating parameter during HCl performance testing every 30 months.	40 CFR §63.1349(b)(8), 63.1350(o) & §63.1349(c)
Opacity	PM CPMS as required by Subpart LLL.	18.5.3(a)
PM	Monitoring & Performance Testing as required by Subpart LLL will also demonstrate compliance with Part 6.4 and the NNSR Avoidance Limits.	18.5.3(a)
PM_{10}	Performance testing using EPA Methods 201A and 202 every 5 years.	18.5.3(a)
VOC	Performance testing for THC as required by Subpart LLL shall include reporting of tested VOC emissions in lb/hr.	18.5.3(a)
NO_X & SO_2 & CO	Monitor with Part 75 CEMS at the baghouse outlet.	18.5.3(a)

Pollutant or Equipment	Compliance Requirements for Kiln (Continued)	Citation
SNCR On/Off	Operate the SNCR from May 1 through September 30 of each year. Maintain records of operation and maintenance of the SNCR system.	10.1.3, 10.1.7 & 18.5.3(a)
Mill-On/Mill-Off	Operating Parameters for PM, D/F, THC and HCl are determined separately for these alternative operating scenarios.	40 CFR 63, Subpart LLL
Clinker Production	Use a CMS to determine hourly clinker production by weighing either the raw materials charged to the kiln or the clinker produced.	40 CFR §63.1350(d), §60.3(b) & 18.5.3
Startup & Shutdown	Keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.	40 CFR §63.1355(f)

Pollutant	Applicable Clinker Cooler Emission Limits & Compliance	Citation
Particulate Matter	0.07 lb/ton clinker	40 CFR §63.1343(b)
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.	Part 6.4
PM & PM_{10}	8.14 lb/hr measured by EPA Method 5 for PM and EPA Methods 201A and 202 for PM_{10}	NSR Avoidance, 18.2.4, & 4-07-0290-02
Opacity	20% as determined by a 6-minute average using by EPA Method 9, except as allowed by 6.1.1(b)	Part 6.1
Demonstrate continuous compliance using a PM CPMS. Conduct a performance test annually and reassess and adjust the site-specific operating limit in accordance with the results.		40 CFR §63.1349(b)(1)
Compliance with the Parts 6.1 & 6.4 and the NNSR Avoidance PM emission limit is demonstrated by the Subpart LLL monitoring and testing requirements.		18.5.3(a)
Compliance with the NNSR Avoidance PM_{10} emission limit is determined by performance testing using EPA Methods 201A and 202 every 5 years.		18.5.3(a)

Affected Sources Other Than Kiln & Clinker Cooler	Applicable Emissions Limits & Compliance	Citation
Raw and Finish Mills	10% Opacity Monitor daily according to 40 CFR §63.1350(f)(2)	40 CFR §63.1343(b) & §63.1345 & 40 CFR §60.62(c)
Storage Bins for Raw Materials, Clinker and Finished Products Conveying System Transfer Points Bagging Systems & Bulk Loading and Unloading Systems	10% Opacity Monitor monthly according to 40 CFR §63.1350(f)(1)	40 CFR §63.1345 & 40 CFR §60.62(c)
Open Clinker Storage Pile(s) (Not Assigned an Emission Unit)	Operate in accordance with Fugitive Dust Emissions Control Measures described in the Operation and Maintenance Plan required by 40 CFR §63.1347	40 CFR §63.1343(c)
Opacity for All Sources Except Open Storage Piles	20% as determined by a 6-minute average using by EPA Method 9, except as allowed by 6.1.1(b) Subpart LLL monitoring requirements	Part 6.1
PM for All Sources Except Open Storage Piles	$E = 3.59p^{0.62}$, 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.	Part 6.4
PM & PM_{10} for All Sources Except Open Storage Piles	Limits for each baghouse are listed in the section for Other Sources Subject to Subpart LLL Subpart LLL monitoring requirements	NSR Avoidance, 18.2.4, & 4-07-0290-02

Operation and Maintenance Plan (Subpart LLL)	Citation
Written Operations and Maintenance Plan for each affected source, including: • 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 of Subpart LLL. • Fugitive dust control measures for open clinker piles of §§63.1343, 63.1345, and 63.1346. • Address periods of startup and shutdown explicitly. • Corrective actions to be taken when visible emissions are observed during any Method 22 visible emissions test conducted on any source subject to the 10% opacity limit. The corrective actions must be initiated within 1 hours of any such observation. • Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.	40 CFR §63.1347

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, Raw Mill, Conditioning Tower and 2 Cyclones	270,815 SCFM Baghouse with Lime Injection and SNCR System

No.	Federally Enforceable Conditions for Kiln	Regulations
	New Source Review Emissions, Production and Fuel Limits	
1.	The kiln exhaust shall not exceed the following emissions rates: A. 19.27 lb of PM per hour, as measured by EPA Method 5 of 40 CFR 60, Appendix A. B. 19.27 lb of PM_{10} per hour, as measured by EPA Methods 201A and 202 of 40 CFR 51, Appendix M. C. 524.82 lb of CO per hour, on a 30-day rolling basis as measured by a CEMS. D. 625.89 lb of NO_X per hour, on a 30-day rolling basis as measured by a CEMS. E. 17.24 lb of VOC per hour, as an average of 3 test runs by EPA Method 25A of 40 CFR 60, Appendix A. F. 102.30 lb of SO_2 per hour, on a 30-day rolling basis as measured by a CEMS.	Avoidance of NSR 18.2.4 4-07-0290-02
2.	The maximum clinker production is limited to 1,006,000 tons per year as a 12-month rolling total. Compliance is demonstrated by recordkeeping.	Avoidance of NSR 18.2.4 4-07-0290-02
3.	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.	18.2.4 4-07-0290-01
	State Implementation Plan, NESHAPs & NSPS	
4.	**State Implementation Plan (SIP)** Emissions Unit 5 is subject to 6.1.1, "Visible Emissions Restriction for Stationary Sources;" Section 6.2.1, "Fugitive Dust;" Part 6.4, "Process Industries – General," Part 6.10, "Cement Plants," and Part 10.1, "Standards for Portland Cement Kilns."	Chapter 6 Chapter 10
5.	**40 CFR 63, Subparts LLL** Emissions Unit 5 is subject to 40 CFR 63, Subpart LLL, "National Emission Standard for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry." The provisions of 40 CFR 63, Subpart A apply according to Table 1 of Subpart LLL.	63.1340
6.	**40 CFR 60, Subpart F** Emissions Unit 5 is no longer subject to a PM emissions limitation under 40 CFR 60, Subpart F, "Standards of Performance for Portland Cement Plants," because the kiln complies with the more stringent PM emissions limitation of 40 CFR 63, Subpart LLL. The opacity limit does not apply because the unit uses a PM CPMS.	60.62(d) 60.62(a)(2) 63.1356
7.	**40 CFR 60, Subpart Y** The coal preparation and processing operations is no longer subject to an opacity limitation of 20% under 40 CFR 60, Subpart Y, "Standards of Performance for Coal Preparation and Processing Plants" because the equipment complies with the more stringent opacity limitation of 40 CFR 63, Subpart LLL.	60.250(b) 60.254(a) 63.1356
8.	**NESHAP General Duty** At all times, the permittee must operate and maintain the affected source, including associated equipment for air pollution control, in a manner consistent with safety and good air pollution control practice for minimizing emissions.	63.1348(d)

No.	Federally Enforceable Conditions for Kiln	Regulations
	SIP & 40 CFR 63, Subpart LLL Emissions Limits	
9.	**Kiln Emissions Limits** A. 0.07 lb of PM per ton of clinker produced. B. 0.2 ng of D/F per dscm (TEQ) (fabric filter inlet temperature >400°F), corrected to 7% oxygen, *or* 0.40 ng of D/F per dscm (TEQ) (fabric filter inlet <400°F). C. 55 lb of mercury per million tons of clinker. D. 24 ppmvd of THC, corrected to 7% oxygen. E. 3 ppmvd of HCl, corrected to 7% oxygen. These emissions limits apply at all times, except that the work practices of 63.1346(g) apply during startup and shutdown periods. The permittee is also subject to and shall comply with PM emissions limits under Parts 6.4 and 6.10.	63.1343(b) & Table 1 of 40 CFR 63, Subpart LLL 6.4 6.10
10.	**Visible Emissions** The raw mill is subject to a 10% opacity limit at all times, including during startup and shutdown periods. All equipment in Emissions Unit 005 is subject to a 20% opacity limit, except as allowed by 6.1.1(b).	63.1343(b) 6.1.1
	Operation & Maintenance Plan Requirements	
11.	The permittee shall prepare, for each affected source under Subpart LLL, a written operations and maintenance plan including 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. Your operations and maintenance plan must address periods of startup and shutdown. B. Corrective actions to be taken when required by paragraph §63.1350(f)(3). C. Procedures to be used during an inspection of the components of the combustion system and each in-line kiln raw mill located at the facility at least once per year. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.	63.1347
	Startup and Shutdown Requirements	
12.	A. During startup, use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit. B. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit. 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). D. Keep records of the date, time and duration of each startup or shutdown period for any affected source that is subject to a standard during startup or shutdown that differs from the standard applicable at other times, and the quantity of feed and fuel used during the startup or shutdown period.	63.1346(g) 63.1355 63.1348(b)(9)
	Monitoring and Compliance Demonstrations	
13.	**Monitoring Plans** A. For each CMS required by Subpart LLL, operate and maintain the CMS in continuous operation according to a site-specific monitoring plan that addresses the following elements: 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);	63.1350(p)

No.	Federally Enforceable Conditions for Kiln	Regulations
	2. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems; and 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); 5. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and 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. The monitoring plan must also include provisions for opacity monitoring for sources subject to an opacity limit under §63.1345.	
14.	**General Requirements for CMS, Operation and Monitoring** Install, operate, and maintain each continuous parameter monitoring system (CPMS) to monitor emissions or operating parameters according to the following requirements: A. Maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests. Any instance where the owner or operator fails to comply with the continuous monitoring requirements of Subpart LLL is a violation. B. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data. C. You must conduct all monitoring in continuous operation at all times that the unit is operating. D. Determine the 1-hour block average of all recorded readings. E. Record the results of each inspection, calibration, and validation check. F. A site-specific monitoring plan is required for each CMS. G. 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. H. You may not use data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. I. If a bag leak detection system is used in accordance with §63.1350(m)(10), the permittee must initiate procedures to determine the cause of every alarm within 8 hours of the alarm in accordance with §63.1350(m)(11). The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary.	63.1350(a) 63.1350(m) 63.1348(b)(1)
15.	**Clinker Production CMS Requirements** 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	63.1350(d) 63.1348(b)(1)(iv) 60.63(b) 18.5.3

No.	Federally Enforceable Conditions for Kiln	Regulations
	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. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated. B. 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 you measure clinker production directly, record the daily clinker production rates; if you measure the kiln feed rates and calculate clinker production, record the hourly kiln feed and clinker production rates. D. Monitoring results shall be used to perform monthly calculations to demonstrate compliance with the clinker production limit (12-month rolling total).	
16.	**Raw Mill Visible Emissions Monitoring** A. Daily Visible Emissions Observations: 1. Monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of 40 CFR 60, Appendix A. The duration of the Method 22 performance test must be 6 minutes. 2. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. B. Prompt Corrective Actions: 1. If visible emissions are observed during any Method 22 visible emissions test conducted under Item A above, initiate, within one-hour, the corrective actions specified in your operation and maintenance plan as required in §63.1347. C. Consecutive observations of VE: 1. If visible emissions are observed during the follow-up Method 22 performance test from any stack, conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of 40 CFR 60, Appendix A. The duration of the Method 9 test must be 30 minutes. D. In lieu of conducting daily Method 22 testing, the permittee may install and operate a COMS or bag leak detection system (BLDS) on any raw or finish mill according to the provisions of 40 CFR §63.1350(f)(4). E. Monitoring provisions for these sources must be included in the Subpart LLL Operation and Maintenance Plan (see Condition 12 above).	63.1350(f)
17.	**Changes in Operations** For any planned change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b). In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions below are met. Submit temperature and other monitoring data that are recorded during the pretest operations.	63.1348(c)

No.	Federally Enforceable Conditions for Kiln	Regulations
	A. You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. The notice provided must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the required 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 Administrator prior to performance testing, if requested. D. The performance test must be completed within 360 hours after the planned operational change period begins.	
18.	**Particulate Matter (PM) CPMS & Performance Testing** The permittee shall use a PM CPMS meeting the specifications of 40 CFR §63.1349(b)(1)(i)(A)&(B) to demonstrate continuous compliance by maintaining the operating parameter values within the operating parameter limits established through performance tests. Repeat the performance test annually and reassess and verify or adjust the site-specific operating limit in accordance with the results of the performance test. You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration. To determine continuous operating compliance, record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for calculations when the source is not out-of-control. Demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps or the digital equivalent) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 7 of Subpart LLL to determine the 30 kiln operating day average. A. Performance Test Requirements for Subpart LLL: 1. Conduct at least three separate test runs using Method 5 or 5I of 40 CFR 60, Appendix A, under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Collect a minimum sample volume 1 dscm per run. The particulate matter collected in the impingers "back half" of the Method 5 or Method 5I particulate sampling train is not included in the compliance demonstration for Subpart LLL. 2. Conduct separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating. Calculate the time weighted average emissions and operating parameter for each scenario. 3. The performance test report must include the information listed at §63.1349(a). 4. For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value or digital equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run. B. Setting the site-specific operating limit for the PM CPMS:	63.1349(b)(1) 63.1350(a) 63.1350(b) 63.1348(b)(2) 18.2.4

No.	Federally Enforceable Conditions for Kiln	Regulations
	1. Record and average all milliamp or digital output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all PM CPMS output values for three corresponding test runs). 2. If the average of three Method 5 or 5I compliance test runs is below 75 percent of the PM emission limit, calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the following procedures: a. Determine the PM CPMS instrument zero output with one of the following procedures: i. Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench. ii. Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air. iii. The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (*e.g.*, when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept. iv. If none of the steps in paragraphs (b)(1)(iii)(A)(*1*) through (*3*) of this section are possible, you must use a zero output value provided by the manufacturer. b. Determine the PM CPMS instrument average in milliamps or digital equivalent, and the average of corresponding three PM compliance test runs, using equation 3 of Subpart LLL. c. With the instrument zero expressed in milliamps or a digital value, the three run average PM CPMS milliamp or digital signal value, and the three run PM compliance test average, determine a relationship of lb/ton-clinker per milliamp or digital signal value with Equation 4 of Subpart LLL. d. Determine the source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp or digital signal value from Equation 4 in Equation 5 of Subpart LLL. This sets the operating limit at the PM CPMS output value corresponding to 75 percent of the emission limit. 3. If the average of three PM compliance test runs is at or above 75 percent of the PM emission limit, determine the operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using Equation 6 of Subpart LLL.	

No.	Federally Enforceable Conditions for Kiln	Regulations
19.	**PM Operating Parameter Exceedances** For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit: A. Within 48 hours of the exceedance, visually inspect the APCD; B. If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and C. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph. D. 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.	63.1350(b)
20.	**Dioxan/Furan (D/F) CMS and Performance Testing** The permittee shall use a CMS to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the baghouse. Operate the kiln such that the temperature of the gas at the inlet to the baghouse does not exceed the applicable temperature limit established during performance testing, 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 raw-mill on and raw-mill off scenarios. A. Monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the baghouse according to the following requirements: 1. The required minimum data collection frequency must be one minute. 2. Every hour, record the calculated rolling three-hour average temperature using the average of 180 successive one-minute average temperatures. 3. 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. 4. The calibration of all thermocouples and other temperature sensors must be verified at least once every three months. 5. The temperature recorder response range must include zero and 1.5 times the average temperature established during the performance test. 6. 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. B. Performance Test Requirements: 1. Use Method 23 of 40 CFR 60, Appendix A. 2. Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf). 3. The temperature at the inlet to the baghouse 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. 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.	63.1346(a) 63.1350(g) 63.1349(b)(3) 63.1348(b)(4)

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	5. The performance test report must include the information listed at §63.1349(a).	
21.	**THC CEMS and Performance Testing** The permittee shall operate a CEMS to monitor THC upstream of the coal mill in accordance with an emissions monitoring plan in accordance with §63.1350(p). To determine continuous compliance with the THC operating limit, record the THC CEMS output data for all periods when the process is operating and the THC CEMS is not out-of-control. Demonstrate continuous compliance by using all quality-assured hourly average data collected by the THC CEMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (ppmvw) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 16 of Subpart LLL to determine the 30 kiln operating day average. A. Monitoring Requirements: 1. Install, operate, and maintain a THC continuous emission monitoring system in accordance with either: a. Performance Specification 8 of 40 CFR 60, Appendix B; or b. Performance Specification 8A of 40 CFR 60, Appendix B, and conduct the relative accuracy test audits required under Procedure 1 in accordance with Performance Specification 8, Sections 8 and 11 using Method 25A in appendix A to 40 CFR part 60 as the reference method; the relative accuracy must meet the criteria of Performance Specification 8, Section 13.2. 2. Comply with all of the requirements for continuous monitoring systems found in 40 CFR 63, Subpart A. 3. Operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of 40 CFR 60, Appendix F. 4. For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 to 60 ppmvw and the reference method is Method 25A of 40 CFR 60, Appendix A. 5. The THC CEMS measurement scale must be capable of reading THC concentrations from zero to a level equivalent to two times your highest THC emissions average determined during the performance test, including mill on or mill off operation. A dual range instrument may be used to meet this requirement. B. Emissions Tests for THC or for the alternate Total Organic HAP limit: 1. Use the THC CEMS to conduct the initial THC compliance test for the first 30 kiln operating days of kiln operation after the compliance date of the rule; or 2. Use Method 320 of 40 CFR 63, Appendix A, Method 18 of 40 CFR 60, Appendix A, ASTM D6348-03 or a combination to determine emissions of total organic HAP. a. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run must be conducted for at least 1 hour. b. Conduct separate performance tests while the raw mill is operating ("mill on") and while the raw mill is not operating ("mill off"). Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the THC levels measured during raw mill on and raw mill off compliance testing with Equation 15 of Subpart LLL. c. During the performance test for total organic HAP, determine a site-specific THC emissions limit by operating a THC CEMS in accordance	63.1349(b)(4) 63.1349(b)(7) 63.1350(i) 63.1350(j) 63.1348(b)(6) 18.5.3(a)

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	with the requirements of §63.1350(j). The duration of the performance test must be at least 3 hours and the average THC concentration (as calculated from the recorded output) during the 3-hour test must be calculated. It is permissible to extend the testing time of the organic HAP performance test if you believe extended testing is required to adequately capture organic HAP and/or THC variability over time. d. Conduct each Method 18 test run to collect a minimum target sample equivalent to three times the method detection limit. e. Determine the operating limit as follow: i. If the average organic HAP results for three Method 18 and/or Method 320 performance test runs are below 75 percent of your organic HAP emission limit, calculate an operating limit by establishing a relationship of THC CEMS signal to the organic HAP concentration using the average THC CEMS value corresponding to the three organic HAP compliance test runs and the average organic HAP total concentration from the Method 18 and/or Method 320 performance test runs with the following procedures: (a) Determine the THC CEMS average values in ppmvw, and the average of your corresponding three total organic HAP compliance test runs, using Equation 12 of Subpart LLL. (b) Use the three run average THC CEMS value and the three run average organic HAP concentration from three Method 18 and/or Method 320 compliance tests to determine the operating limit. Use Equation 13 of Subpart LLL to determine the operating limit in units of ppmvw THC, as propane. (c) THC CEMS must be calibrated and operated on a measurement scale no greater than 180 ppmvw, as carbon, or 60 ppmvw as propane. ii. If the average of three organic HAP performance test runs is at or above 75 percent of the organic HAP emission limit, determine the operating limit using Equation 14 of Subpart LLL by averaging the THC CEMS output values corresponding to the three organic HAP performance test runs that demonstrate compliance with the emission limit. If the new THC CEMS value is below your current operating limit, you may opt to retain your current operating limit, but you must still submit all performance test and THC CEMS data according to the reporting requirements in 63.1349(d)(1). 3. Repeat the performance test no later than 30 months following the last performance test and reassess and adjust the site-specific operating limit in accordance with the results of the performance test. Establish a new operating limit after each performance test. 4. The test report shall include VOC emissions reported in lb/hr of VOC for comparison to the emission limit established for NSR Avoidance and 18.2.4, as established in Permit 4-07-0290-02.	
22.	**<u>THC Emissions Exceedances</u>** If the THC level exceeds the site-specific THC emissions limit by 10 percent or more: A. As soon as possible but no later than 30 days after the exceedance, conduct an inspection and take corrective action to return the THC CEMS measurements to within the established value; and B. Within 90 days of the exceedance or at the time of the 30 month compliance test, whichever comes first, conduct another performance test to determine	63.1349(b)(7)

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	compliance with the organic HAP limit and to verify or re-establish the site-specific THC emissions limit.	
23.	**Mercury Monitoring and Emissions Tests** Demonstrate compliance with the mercury emissions standards by operating a sorbent trap based CEMS to measure mercury upstream of the coal mill. A. Mercury Monitoring & Performance Test Requirements: 1. Install and operate an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of 40 CFR 60, Appendix B. 2. Operate and maintain an integrated sorbent trap monitoring system according to the quality assurance requirements in Procedure 5 of 40 CFR 60, Appendix F. During the RATA of integrated sorbent trap monitoring systems required under Procedure 5, apply the appropriate exception for sorbent trap section 2 breakthrough as follows: a. For stack Hg concentrations >1 µg/dscm, ≤10% of section 1 mass; b. For stack Hg concentrations ≤1 µg/dscm and >0.5 µg/dscm, ≤20% of section 1 mass; c. For stack Hg concentrations ≤0.5 µg/dscm and >0.1 µg/dscm, ≤50% of section 1 mass; and d. For stack Hg concentrations ≤0.1 µg/dscm, no breakthrough criterion assuming all other QA/QC specifications are met. 3. Relative accuracy testing of mercury monitoring systems under PS 12A, PS 12B, or Procedure 5 must be conducted at normal operating conditions. If a facility has an inline raw mill, the testing must occur with the raw mill on. 4. Calculate the emission rate using Equation 10 of Subpart LLL. 5. For an integrated sorbent trap monitoring system conforming to PS 12B, use a monitoring period that is a multiple of 24 hours (except during relative accuracy testing as allowed in PS 12B) of at least 24 hours but no longer than 168 hours in length. 6. In calculating a 30 operating day emissions value using an integrating sorbent trap CEMS, assign the average Hg emissions concentration determined for an integrating period (e.g., 7 day sorbent trap monitoring system sample) to each relevant hour of the kiln operating days spanned by each integrated sample. Calculate the 30 kiln operating day emissions rate value using the assigned hourly Hg emissions concentrations and the respective flow and production rate values collected during the 30 kiln operating day performance test period. Depending on the duration of each integrated sampling period, you may not be able to calculate the 30 kiln operating day emissions value until several days after the end of the 30 kiln operating day performance test period. 7. Sorbent trap change periods may be scheduled at any time of the day. B. Exhaust Gas Flow Rate Monitoring Requirements: 1. Install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate. 2. Install each sensor of the flow rate monitoring system in a location that provides representative measurement of the exhaust gas flow rate at the sampling location of the mercury CEMS, taking into account the manufacturer's recommendations. The flow rate sensor is that portion of the system that senses the volumetric flow rate and generates an output proportional to that flow rate. 3. 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.	63.1349(b)(5) 63.1348(b)(7) 63.1350(k) 63.1350(n)

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	4. The flow rate monitoring system must be equipped with a data acquisition and recording system that is capable of recording values over the entire range specified above. 5. The signal conditioner, wiring, power supply, and data acquisition and recording system for the flow rate monitoring system must be compatible with the output signal of the flow rate sensors used in the monitoring system. 6. The flow rate monitoring system must be designed to complete a minimum of one cycle of operation for each successive 15-minute period. 7. The flow rate sensor must have provisions to determine the daily zero and upscale calibration drift (CD) (see sections 3.1 and 8.3 of Performance Specification 2 in 40CFR 60, Appendix B for a discussion of CD). a. 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). b. The absolute value of the difference between the flow monitor response and the reference signal must be equal to or less than 3 percent of the flow monitor span. 8. Perform an initial relative accuracy test of the flow rate monitoring system according to Section 8.2 of Performance Specification 6 of 40 CFR 60, Appendix B to part 60 except as follows: a. The relative accuracy test is to evaluate the flow rate monitoring system alone rather than a continuous emission rate monitoring system. b. The relative accuracy of the flow rate monitoring system shall be no greater than 10 percent of the mean value of the reference method data. 9. Verify the accuracy of the flow rate monitoring system at least once per year by repeating the relative accuracy test specified above. 10. 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)	
24.	**<u>HCl Monitoring Using an SO_2 Operating Parameter</u>** Demonstrate compliance with the HCl emissions standards by using an SO_2 CEMS to establish an SO_2 operating level during HCl performance tests and continuously monitor the SO_2 level upstream of the coal mill according to the requirements of 40 CFR §60.63(e) and (f), and using the following procedures: A. SO_2 Monitoring Requirements: 1. To determine continuous compliance with the SO_2 operating limit, 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. Demonstrate continuous compliance by using 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. Use Equation 21 of Subpart LLL to determine the 30 kiln operating day average. 2. This SO_2 operating limit will apply only for demonstrating HCl compliance. B. CMS to measure lime addition mass flow rate, in addition to the general CMS requirements of Condition 15 above: 1. Locate the device in a position(s) that provides a representative measurement of the total sorbent injection rate. 2. Install and calibrate the device in accordance with manufacturer's procedures and specifications.	63.1348(b)(8) 63.1350(l)(3) 63.1348(a)(6) 63.1349(b)(6)(iii) 63.1349(b)(8) 63.1350(m)(9)

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	3. At least annually, calibrate the device in accordance with the manufacturer's procedures and specifications. C. HCl Emissions Tests and Establishing Operating Parameter: 1. Use Method 321 of 40 CFR 63, Appendix A to determine emissions of HCl. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). A separate performance test is required for the mill on and mill off operating scenarios. Each run must be conducted for at least one hour. 2. At the same time that you are conducting the performance test for HCl, you must also determine a site-specific SO_2 emissions limit by operating an SO_2 CEMS. The duration of the performance test must be three hours and the average SO_2 concentration (as calculated from the average output) during the 3-hour test must be calculated. 3. You must establish your SO_2 operating limit and determine compliance with it according to the following requirements if the average of three HCl compliance test runs is below 75 percent of your HCl emission limit, use following procedures: a. Determine your SO_2 CEMS instrument zero output with one of the 4 procedures at §63.1349(b)(8)(vii)(A). b. Determine your SO_2 CEMS instrument average ppm, and the average of your corresponding three HCl compliance test runs, using Equation 18 of Subpart LLL. c. With your instrument zero expressed in ppmv, your three run average SO_2 CEMS expressed in ppmv, and your three run HCl compliance test average in ppm corrected to 7 percent O_2, determine a relationship of ppm HCl corrected to 7 percent O_2 per ppm SO_2 with Equation 19 of Subpart LLL. d. Determine your source specific 30-day rolling average operating limit using ppm HCl corrected to 7 percent O_2 per ppm SO_2 value from Equation 19 in Equation 20 of Subpart LLL. This sets your operating limit at the SO_2 CEMS ppm value corresponding to 75 percent of your emission limit. 4. Using the fraction of time the raw mill is on and the fraction of time that the raw mill is off, calculate this limit as a weighted average of the SO_2 levels measured during raw mill on and raw mill off compliance testing with Equation 17 of Subpart LLL. 5. The SO_2 CEMS must be calibrated and operated according to the requirements of §60.63(f) and the 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.	
25.	**SO_2 Emissions Exceedances** If SO_2 levels increase above the 30-day rolling average SO_2 operating limit established during your performance test by 10 percent or more: A. As soon as possible but no later than 30 days after you exceed the established SO_2 value conduct an inspection and take corrective action to return the SO_2 emissions to within the operating limit; and B. Within 90 days of the exceedance or at the time of the next compliance test, whichever comes first, conduct an HCl emissions compliance test to determine compliance with the HCl emissions limit and to verify or re-establish the SO_2 CEMS operating limit.	63.1350(l)(3) 63.1349(b)(8)(x)

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26.	**Lime Injection System Operating Parameter Monitoring** A. The permittee shall operate a Lime Injection System to reduce particulate matter (PM) emissions and PM_{10} emissions to no more than 19.27 lb/hr as required by the PSD Avoidance Limits. B. The permittee shall operate the Lime Injection System continuously, Mill-On and Mill-Off conditions. C. Performance test requirements for PSD Avoidance PM Emissions Limit: 1. Performance testing for this limitation 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. D. Establish a site-specific operating parameter limit for the lime injection system using the CMS required by Subpart LLL (see Condition 24.B above) during PM, PM_{10} and HCl performance testing. The performance test for HCl shall be in accordance with Subpart LLL requirements. A separate test must be conducted for Mill-On and Mill-Off operating scenarios. E. The permittee shall compute and record the 24-hour average sorbent injection rate and average sorbent injection rate for each sampling run in which the applicable emissions limit is met during the performance test. The highest lime injection rate in tons/hr that was measured during the Mill-On and Mill-Off performance tests in which compliance with the PM and/or HCl emissions limits shall become the minimum lime injection rate during operations and shall be the lime feed set point for all three pollutants. F. The permittee shall operate and maintain the daily block 24-hour sorbent injection rate above the minimum parameter value established during the initial performance test. G. The lime injection rate may be used as an alternative operating parameter (instead of SO_2) to monitor HCl emissions compliance for Subpart LLL.	18.2.4 63.1350(o)
27.	**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 VOC emissions rate shall be measured by EPA Reference Method 25A of 40 CFR 60, Appendix A. To demonstrate compliance, a source emissions test may be required by the Department at any time.	18.2.4
28.	**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 the pollutants listed below for compliance with the stated emissions limitations. 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. A. CO emissions limitation of 524.82 lb/hr on a 30-day rolling average. B. NO_X emissions limitation of 625.89 lb/hr on a 30-day rolling average. C. SO_2 emissions limitation of 102.30 lb/hr on a 30-day rolling average.	18.2.4

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29.	**Performance Specifications and Procedures for CEMS** The CEMS, in Condition Nos. 13, 14, and 16, 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. The following shall also apply: **DATA FILLING** 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. $$\%\ \text{Availability} = \frac{\text{Total unit operating hours for which data were recorded since certification}}{\text{Total unit operating hours since certification}} \quad (1)$$ $$\%\ \text{Availability} = \frac{\text{Total unit operating hours for which data were recorded in previous 8,760 unit operating hours}}{8{,}760} \quad (2)$$ 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% a. less than or equal to 24 hours of consecutive missing data b. greater than 24 hours of consecutive missing data B. Greater than or equal to 90%, but less than 95% a. less than or equal to 8 hours of consecutive missing data b. greater than 8 hours of consecutive missing data C. Less than 90% Table 1 summarizes the proposed data filling for the conditions described above. The filling routine is closely modeled on the data filling routines in Part 75. **Table 1. MISSING DATA PROCEDURE**	40 CFR 75 40 CFR 60, Appendix F

Trigger Condition		Calculation Routines	
Monitor data availability (%)	Duration (N) of monitor outage (hr)	Method	Lookback period (monitor operating hours)
95 or more	N <= 24 N > 24	Arithmetic average 90th percentile	2,160 2,160
90 or more, but below 95	N<= 8 N > 8	Arithmetic average 95th percentile	2,160 2,160
Below 90	N > 0	Maximum monitored value	2,160

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30.	**NO_X Equipment Standard For Ozone Season** The permittee subject to this rule shall not operate the kiln during the May 1st through September 30th unless the kiln has installed and operates during the May 1st to September 30th with Low-NO_X burners and Selective Non-Catalytic Reduction (SNCR) technology.	10.1.3
31.	**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. E. After the discovery of no reagent flow, the permittee shall re-establish flow no later than 24 hours of said event.	10.1.3 SIP Contingency Measure from 4-07-0290-03 Conditions 45-47, approved 7/30/2009 at 74 FR 37945 52.50(d)
	Recordkeeping	
32.	The permittee shall maintain the following records: A. To enable annual emissions reporting: 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 May 1 through September 30 of each year, maintain records that include: 1. 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 NOX emissions or emissions monitoring; and 2. The results of any compliance testing. C. For 40 CFR 63, Subpart LLL: 1. Files of all information (including all reports and notifications) required by Subpart LLL recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1); 2. All documentation supporting initial notifications and notifications of compliance status under §63.9; 3. All records of applicability determination, including supporting analyses; 4. All records required by §63.10(c) for each continuous monitoring system; 5. Records of the daily clinker production rates according to the clinker production monitoring requirements in §63.1350(d); 6. Records of the date, time and duration of each startup or shutdown period for the kiln, and the quantity of feed and fuel used during the startup or shutdown period;	10.1.7 18.5.3(b) 18.7.1 63.1355

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	7. Records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions; 8. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and 9. For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.	
	Periodic Reporting	
33.	**Semi-Annual Reporting** The following information shall be reported for each semiannual period: A. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions; B. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted; C. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments; D. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report; and E. For excess emissions and continuous monitoring system performance reports and summary reports as required by §63.10(e)(3); emissions and parameter monitoring exceedances are defined in the relevant standards. The permittee of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Department semiannually. F. For each affected source equipped with a continuous emission monitor, 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 as required by§63.10(e)(3). G. If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.	18.5.3 63.1354(b)(8) 63.1354(b)(10)

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	H. Submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include: a. All exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b); b. Notification of any failure to calibrate thermocouples and other temperature sensors as required under §63.1350(g)(1)(iii) of this subpart. c. Notification of any failure to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1346(c)(2). d. Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3). e. Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a). f. For each PM CPMS, HCl and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems. g. 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.	63.1354(b)(9)
	I. All reports required by this subpart not subject to the requirements in 40 CFR §63.1354(b)(9) introductory text and §63.1354 (b)(11)(i) must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to 40 CFR §63.1354(b)(9) introductory text and §63.1354(b)(11)(i) in paper format.	63.1354(b)(12)

No.	Federally Enforceable Conditions for Kiln	Regulations
34.	**Reporting for Ozone Season NO_X Emissions** A. Within 30 days of the end of each Ozone Season (May 1st – September 30th), the permittee shall report to the Permitting Authority 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. B. 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. C. Annual Reporting beginning with emissions year 2004: 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. D. Triennial Reporting beginning with emissions year 2005: 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.	SIP Contingency Measure from 4-07-0290-03 Condition 48, approved 7/30/2009 at 74 FR 37945 52.50(d) 10.1.6 10.1.4(b)
35.	**Annual Emissions Reporting (JCDH Requirement)** The permittee shall maintain the records required by Conditions 26, 27 and 33 above and include the following information for the previous calendar year in the annual emissions report as the basis for emissions calculations: A. Quantity and average moisture content of kiln feed (tons); B. Quantity of clinker produced (tons); C. Quantity of fuels used by type; D. Quantity of lime injected; E. Quantity of aqueous ammonia (or urea) injected; F. Total hours of operation of the kiln; G. Total hours of operation of the Loesche (raw) mill; H. Mill-On hours of operation of the kiln; and I. Mill-Off hours of operation of the kiln.	1.5.15 1.9.2 18.7.1 18.5.3

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
	New Source Review Emissions and Production Limits	
1.	The kiln exhaust shall not exceed the following emissions rates: A. 8.14 lb of PM per hour, as measured by EPA Method 5 of 40 CFR 60, Appendix A. B. 8.14 lb of PM_{10} per hour, as measured by EPA Methods 201A and 202 of 40 CFR 51, Appendix M.	Avoidance of PSD (Part 2.4) 18.2.4
2.	The maximum clinker production is limited to 1,006,000 tons per year as a 12-month rolling total.	Avoidance of PSD (Part 2.4) 18.2.4
	State Implementation Plan, NESHAPs & NSPS	
3.	**State Implementation Plan (SIP)** Emissions Unit 5 is subject to 6.1.1, "Visible Emissions Restriction for Stationary Sources;" Section 6.2.1, "Fugitive Dust;" Part 6.4, "Process Industries – General," and Part 6.10, "Cement Plants."	Chapter 6
4.	**40 CFR 63, Subparts LLL** Emissions Unit 006 is subject to 40 CFR 63, Subpart LLL, "National Emission Standard for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry." The provisions of 40 CFR 63, Subpart A apply according to Table 1 of Subpart LLL.	63.1340
5.	**40 CFR 60, Subpart F** Emissions Unit 006 is no longer subject to a PM emissions limitation under 40 CFR 60, Subpart F, "Standards of Performance for Portland Cement Plants," because the kiln complies with the more stringent PM emissions limitation of 40 CFR 63, Subpart LLL. The opacity limit does not apply because the unit uses a PM CPMS.	60.62(d) 60.62(b)(1) 63.1356
6.	**NESHAP General Duty** At all times, the permittee must operate and maintain the affected source, including associated equipment for air pollution control, in a manner consistent with safety and good air pollution control practice for minimizing emissions.	63.1348(d)
	SIP & 40 CFR 63, Subpart LLL Emissions Limits	
7.	**Clinker Cooler Emissions Limits** The permittee shall not cause or allow the emissions from the clinker cooler to exceed 0.07 lb of PM per ton of clinker produced. These emissions limit applies at all times, except that the work practices of 63.1348(b)(9) apply during startup and shutdown periods. The permittee shall operate the particulate control device during startup and shutdown. The permittee is also subject to and shall comply with PM emissions limits under Parts 6.4 and 6.10.	63.1343(b) & Table 1 of 40 CFR 63, Subpart LLL 6.4 6.10
8.	**Visible Emissions** All equipment in Emissions Unit 006 is subject to a 20% opacity limit, except as allowed by 6.1.1(b).	6.1.1
	Operation & Maintenance Plan Requirements	
9.	The permittee shall prepare, for each affected source under Subpart LLL, a written operations and maintenance plan including 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	63.1347

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	limits, including fugitive dust control measures for open clinker piles of §§63.1343, 63.1345, and 63.1346. Your operations and maintenance plan must address periods of startup and shutdown. B. Corrective actions to be taken when required by paragraph §63.1350(f)(3). C. Procedures to be used during an inspection of the components of the combustion system and each in-line kiln raw mill located at the facility at least once per year. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.	
	Monitoring and Compliance Demonstrations	
10.	**Monitoring Plans** A. For each CMS required by Subpart LLL, operate and maintain the CMS in continuous operation according to a site-specific monitoring plan that addresses the following elements: 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; and 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); 5. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and 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. The monitoring plan must also include provisions for opacity monitoring for sources subject to an opacity limit under §63.1345.	63.1350(p)
11.	**General Requirements for CMS, Operation and Monitoring** Install, operate, and maintain each continuous parameter monitoring system (CPMS) to monitor emissions or operating parameters according to the following requirements: A. Maintain the average emissions or the operating parameter values within the operating parameter limits established through performance tests. Any instance where the owner or operator fails to comply with the continuous monitoring requirements of Subpart LLL is a violation. B. The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data. C. You must conduct all monitoring in continuous operation at all times that the unit is operating. D. Determine the 1-hour block average of all recorded readings. E. Record the results of each inspection, calibration, and validation check. F. A site-specific monitoring plan is required for each CMS. G. 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	63.1350(a) 63.1350(m) 63.1348(b)(1)

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	the monitoring system and collect data at all required intervals at all times the affected source is operating. H. You may not use data recorded during monitoring system startup, shutdown or malfunctions or repairs associated with monitoring system malfunctions in calculations used to report emissions or operating levels. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system. I. If a bag leak detection system is used in accordance with §63.1350(m)(10), the permittee must initiate procedures to determine the cause of every alarm within 8 hours of the alarm in accordance with §63.1350(m)(11). The owner or operator must alleviate the cause of the alarm within 24 hours of the alarm by taking whatever corrective action(s) are necessary.	
12.	**Clinker Production CMS Requirements** 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. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln-specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. Update this ratio monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated. B. 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 you measure clinker production directly, record the daily clinker production rates; if you measure the kiln feed rates and calculate clinker production, record the hourly kiln feed and clinker production rates. D. Monitoring results shall be used to perform monthly calculations to demonstrate compliance with the clinker production limit (12-month rolling total).	63.1350(d) 63.1348(b)(1)(iv) 18.2.4
13.	**Changes in Operations** For any planned change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b). In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions below are met. Submit temperature and other monitoring data that are recorded during the pretest operations. A. You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. The notice provided must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the required performance test, including when the planned operational change period would begin.	63.1348(c)

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	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 Administrator prior to performance testing, if requested. D. The performance test must be completed within 360 hours after the planned operational change period begins.	
14.	**PM CPMS & Performance Testing** The permittee shall use a PM CPMS meeting the specifications of 40 CFR §63.1349(b)(1)(i)(A)&(B) to demonstrate continuous compliance by maintaining the operating parameter values within the operating parameter limits established through performance tests. Repeat the performance test annually and reassess and verify or adjust the site-specific operating limit in accordance with the results of the performance test. You must also repeat the test if you change the analytical range of the instrument, or if you replace the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration. To determine continuous operating compliance, record the PM CPMS output data for all periods when the process is operating, and use all the PM CPMS data for calculations when the source is not out-of-control. Demonstrate continuous compliance by using all quality-assured hourly average data collected by the PM CPMS for all operating hours to calculate the arithmetic average operating parameter in units of the operating limit (milliamps or the digital equivalent) on a 30 operating day rolling average basis, updated at the end of each new kiln operating day. Use Equation 7 of Subpart LLL to determine the 30 kiln operating day average. C. Performance Test Requirements for Subpart LLL: 1. Conduct at least three separate test runs using Method 5 or 5I of 40 CFR 60, Appendix A, under the conditions that exist when the affected source is operating at the level reasonably expected to occur. Collect a minimum sample volume 1 dscm per run. The particulate matter collected in the impingers "back half" of the Method 5 or Method 5I particulate sampling train is not included in the compliance demonstration for Subpart LLL. 2. Conduct separate performance tests while the raw mill is under normal operating conditions and while the raw mill is not operating. Calculate the time weighted average emissions and operating parameter for each scenario. 3. The performance test report must include the information listed at §63.1349(a). 4. For PM performance test reports used to set a PM CPMS operating limit, the electronic submission of the test report must also include the make and model of the PM CPMS instrument, serial number of the instrument, analytical principle of the instrument (e.g. beta attenuation), span of the instruments primary analytical range, milliamp value or digital equivalent to the instrument zero output, technique by which this zero value was determined, and the average milliamp or digital equivalent signals corresponding to each PM compliance test run. D. Setting the site-specific operating limit for the PM CPMS: 1. Record and average all milliamp or digital output values from the PM CPMS for the periods corresponding to the compliance test runs (e.g., average all PM CPMS output values for three corresponding test runs). 2. If the average of three Method 5 or 5I compliance test runs is below 75 percent of the PM emission limit, calculate an operating limit by establishing a relationship of PM CPMS signal to PM concentration using the PM CPMS instrument zero, the average PM CPMS values corresponding to the three compliance test runs, and the average PM concentration from the Method 5 or 5I compliance test with the following procedures:	63.1349(b)(1) 63.1350(a) 63.1350(b) 63.1348(b)(2) 18.2.4

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	a. Determine the PM CPMS instrument zero output with one of the following procedures: i. Zero point data for in-situ instruments should be obtained by removing the instrument from the stack and monitoring ambient air on a test bench. ii. Zero point data for extractive instruments should be obtained by removing the extractive probe from the stack and drawing in clean ambient air. iii. The zero point may also be established by performing manual reference method measurements when the flue gas is free of PM emissions or contains very low PM concentrations (*e.g.*, when your process is not operating, but the fans are operating or your source is combusting only natural gas) and plotting these with the compliance data to find the zero intercept. iv. If none of the steps in paragraphs (b)(1)(iii)(A)(*1*) through (*3*) of this section are possible, you must use a zero output value provided by the manufacturer. b. Determine the PM CPMS instrument average in milliamps or digital equivalent, and the average of corresponding three PM compliance test runs, using equation 3 of Subpart LLL. c. With the instrument zero expressed in milliamps or a digital value, the three run average PM CPMS milliamp or digital signal value, and the three run PM compliance test average, determine a relationship of lb/ton-clinker per milliamp or digital signal value with Equation 4 of Subpart LLL. d. Determine the source specific 30-day rolling average operating limit using the lb/ton-clinker per milliamp or digital signal value from Equation 4 in Equation 5 of Subpart LLL. This sets the operating limit at the PM CPMS output value corresponding to 75 percent of the emission limit. 3. If the average of three PM compliance test runs is at or above 75 percent of the PM emission limit, determine the operating limit by averaging the PM CPMS milliamp or digital equivalent output corresponding to your three PM performance test runs that demonstrate compliance with the emission limit using Equation 6 of Subpart LLL.	
15.	**PM Operating Parameter Exceedances** For any exceedance of the 30 process operating day PM CPMS average value from the established operating parameter limit: A. Within 48 hours of the exceedance, visually inspect the APCD; B. If inspection of the APCD identifies the cause of the exceedance, take corrective action as soon as possible and return the PM CPMS measurement to within the established value; and C. Within 30 days of the exceedance or at the time of the annual compliance test, whichever comes first, conduct a PM emissions compliance test to determine compliance with the PM emissions limit and to verify or re-establish the PM CPMS operating limit within 45 days. You are not required to conduct additional testing for any exceedances that occur between the time of the original exceedance and the PM emissions compliance test required under this paragraph. D. 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.	63.1350(b)

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	Recordkeeping	
16.	The permittee shall maintain the following records: A. To enable annual emissions reporting: 1. Quantity of clinker through the cooler (tons); 2. Hours of operation of the cooler. B. For 40 CFR 63, Subpart LLL: 1. Files of all information (including all reports and notifications) required by Subpart LLL recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1); 2. All documentation supporting initial notifications and notifications of compliance status under §63.9; 3. All records of applicability determination, including supporting analyses; 4. All records required by §63.10(c) for each continuous monitoring system; 5. Records of the daily clinker production rates according to the clinker production monitoring requirements in §63.1350(d); 6. Records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard for which the source failed to meet a standard, and a description of the method used to estimate the emissions; 7. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and 8. For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.	18.5.3(b) 18.7.1 63.1355
	Periodic Reporting	
17.	**<u>Semi-Annual Reporting</u>** The following information shall be reported for each semiannual period: A. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions; B. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted; C. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments; D. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report; and E. For excess emissions and continuous monitoring system performance reports and summary reports as required by 63.10(e)(3); emissions and parameter monitoring exceedances are defined in the relevant standards. The permittee of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Department semiannually.	18.5.3

No.	Federally Enforceable Conditions for Clinker Cooler	Regulations
	F. For each affected source equipped with a continuous emission monitor, 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 as required by§63.10(e)(3).	63.1354(b)(8)
	G. Submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). You must use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include: a. Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a). b. For each PM CPMS, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS. c. 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.	63.1354(b)(9)
	H. If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.	63.1354(b)(10)
	I. All reports required by this subpart not subject to the requirements in 40 CFR §63.1354(b)(9) introductory text and §63.1354(b)(11)(i) must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to 40 CFR §63.1354(b)(9) introductory text and §63.1354(b)(11)(i) in paper format.	63.1354(b)(12)
18.	**<u>Annual Emissions Reporting (JCDH Requirement)</u>** The permittee shall include the following information for the previous calendar year in the annual emissions report as the basis for emissions calculations: A. Quantity of clinker through the cooler (tons); B. Hours of operation of the cooler.	1.5.15 1.9.2 18.7.1 18.5.3

FEDERALLY ENFORCEABLE CONDITIONS FOR OTHER SOURCES SUBJECT TO 40 CFR 63, SUBPART LLL

Emissions Unit No.	Emissions Unit Description, Other Sources Subject to Subpart LLL	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)	2,326 SCFM Baghouse
	Clinker Handling	
007	Clinker Pan Conveyor and Clinker Cooler Baghouse Dust Conveyor	2,402 SCFM Baghouse
008	Clinker Withdrawal System	(9) 1,250 SCFM DCE Vokes Baghouses
008	Clinker Storage Silo and Conveyor Transfer Point	12,600 SCFM Baghouse
009	Pan Conveyor and Bucket Elevator	9,000 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
013	No. 7 Finish Mill Feed-Belt Conveyor and Feeders	11,522 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
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)
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

Emissions Unit No.	Emissions Unit Description, Other Sources Subject to Subpart LLL	Control Device
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
061	"D" Outer Silo No. 2	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	533 SCFM Baghouse
059	"D" Silo Truck Loading Spout Station No. 2	533 SCFM Baghouse
060	"D" Silo Rail Car Loading Spout	533 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></td><td>New Source Review Emissions Limits</td><td></td></tr>
<tr><td>1.</td><td>The listed baghouses shall not exceed the following emissions rates:
<table>
<tr><th>Emission Unit No.</th><th>Air Flow</th><th>PM Emissions Limit</th><th>PM10 Emissions Limits</th></tr>
<tr><td>003</td><td>8,700 SCFM</td><td>1.49 lb/hr</td><td>1.27 lb/hr</td></tr>
<tr><td>004</td><td>5,500 SCFM</td><td>0.42 lb/hr</td><td>0.36 lb/hr</td></tr>
<tr><td>007</td><td>2,402 SCFM</td><td>0.41 lb/hr</td><td>0.35 lb/hr</td></tr>
<tr><td>008</td><td>1,250 SCFM (9)</td><td>0.10 lb/hr</td><td>0.08 lb/hr</td></tr>
<tr><td>008</td><td>12,600 SCFM</td><td>0.97 lb/hr</td><td>0.83 lb/hr</td></tr>
<tr><td>009</td><td>9,000 SCFM</td><td>0.69 lb/hr</td><td>0.59 lb/hr</td></tr>
<tr><td>010</td><td>17,982 SCFM</td><td>1.39 lb/hr</td><td>1.18 lb/hr</td></tr>
<tr><td>011</td><td>20,000 SCFM</td><td>1.54 lb/hr</td><td>1.31 lb/hr</td></tr>
<tr><td>012</td><td>14,454 SCFM</td><td>1.11 lb/hr</td><td>0.95 lb/hr</td></tr>
<tr><td>013</td><td>11,522 SCFM</td><td>0.89 lb/hr</td><td>0.76 lb/hr</td></tr>
<tr><td>014</td><td>21,942 SCFM</td><td>1.69 lb/hr</td><td>1.44 lb/hr</td></tr>
</table></td><td>Avoidance of PSD (Part 2.4) 18.2.4</td></tr>
</table>

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations

015	11,352 SCFM	0.88 lb/hr	0.74 lb/hr
016	16,000 SCFM	1.23 lb/hr	1.05 lb/hr
017	1,242 SCFM	0.21 lb/hr	0.18 lb/hr
018	6,083 SCFM	1.04 lb/hr	0.89 lb/hr
019	6,022 SCFM	1.03 lb/hr	0.88 lb/hr
020	6,083 SCFM	1.04 lb/hr	0.89 lb/hr
021	6,083 SCFM	1.04 lb/hr	0.89 lb/hr
022	3,476 SCFM	0.60 lb/hr	0.51 lb/hr
023	1,200 SCFM	0.21 lb/hr	0.18 lb/hr
024	22,000 SCFM	1.70 lb/hr	1.44 lb/hr
025	14,000 SCFM	1.08 lb/hr	0.92 lb/hr
026	14,000 SCFM	1.08 lb/hr	0.92 lb/hr
027	3,371 SCFM	0.58 lb/hr	0.49 lb/hr
028	1,200 SCFM	0.21 lb/hr	0.18 lb/hr
029	1,300 SCFM	0.22 lb/hr	0.19 lb/hr
030	1,300 SCFM	0.22 lb/hr	0.19 lb/hr
031	1,000 SCFM	0.17 lb/hr	0.15 lb/hr
034	2,326 SCFM	0.18 lb/hr	0.15 lb/hr
051	2,141 SCFM	0.17 lb/hr	0.17 lb/hr
052	2,141 SCFM	0.17 lb/hr	0.17 lb/hr
053	2,141 SCFM	0.17 lb/hr	0.17 lb/hr
054	2,752 SCFM	0.21 lb/hr	0.21 lb/hr
055	2,997 SCFM	0.23 lb/hr	0.23 lb/hr
056	2,997 SCFM	0.23 lb/hr	0.23 lb/hr
057	2,997 SCFM	0.23 lb/hr	0.23 lb/hr
058	533 SCFM	0.04 lb/hr	0.04 lb/hr
059	533 SCFM	0.04 lb/hr	0.04 lb/hr
060	533 SCFM	0.04 lb/hr	0.04 lb/hr
061	2,141 SCFM	0.17 lb/hr	0.17 lb/hr

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. The baghouses are also subject to and shall comply with Part 6.4 of the Rules and Regulations.

	State Implementation Plan, NESHAPs & NSPS	
2.	**State Implementation Plan (SIP)** The emissions units listed above are subject to 6.1.1, "Visible Emissions Restriction for Stationary Sources;" Section 6.2.1, "Fugitive Dust;" Part 6.4, "Process Industries – General."	Chapter 6
3.	**40 CFR 63, Subparts LLL** The emissions units listed above are subject to 40 CFR 63, Subpart LLL, "National Emission Standard for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry." The provisions of 40 CFR 63, Subpart A apply according to Table 1 of Subpart LLL.	63.1340
4.	**40 CFR 60, Subpart F** The emissions units listed above are subject to 40 CFR 60, Subpart F, "Standards of Performance for Portland Cement Plants."	60.60(a)

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
5.	**NESHAP General Duty** At all times, the permittee must operate and maintain the affected source, including associated equipment for air pollution control, in a manner consistent with safety and good air pollution control practice for minimizing emissions.	63.1348(d)
	SIP, NESHAPs & NSPS Emissions Limits	
6.	**Particulate Matter Emissions Limitations** The permittee shall not cause or allow the emissions from any emissions unit listed above to exceed the particulate matter emissions limits of Table 6-2 of the Rules and Regulations, or as interpolated by the following equations: $E = 3.59p^{0.62}$, 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
7.	**Visible Emissions** The emissions units listed above are subject to a 10% opacity limit at all times, including during startup and shutdown periods. All equipment listed above is subject to a 20% opacity limit, except as allowed by 6.1.1(b).	63.1341(b) 60.62(c) 6.1.1
	Operation & Maintenance Requirements	
8.	**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)
9.	**Subpart LLL Operation and Maintenance Plan** The permittee shall prepare, for each affected source under Subpart LLL, a written operations and maintenance plan including 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. Your operations and maintenance plan must address periods of startup and shutdown. B. Corrective actions to be taken when required by paragraph §63.1350(f)(3). C. Procedures to be used during an inspection of the components of the combustion system and each in-line kiln raw mill located at the facility at least once per year.	63.1347

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.	
	Monitoring and Compliance Demonstrations	
10.	**Monitoring Plans** A. For each CMS required by Subpart LLL, operate and maintain the CMS in continuous operation according to a site-specific monitoring plan that addresses the following elements: 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; and 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); 5. Ongoing data quality assurance procedures in accordance with the general requirements of §63.8(d); and 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. The monitoring plan must also include provisions for opacity monitoring for sources subject to an opacity limit under §63.1345.	63.1350(p)
11.	**Changes in Operations** For any planned change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in §63.1349(b). In preparation for and while conducting a performance test required in §63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions below are met. Submit temperature and other monitoring data that are recorded during the pretest operations. A. You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. The notice provided must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the required 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 Administrator prior to performance testing, if requested. D. The performance test must be completed within 360 hours after the planned operational change period begins.	63.1348(c)

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
12.	**Opacity Monitoring – Sources Other than Finish Mills** A. Monitoring provisions for these sources must be included in the Subpart LLL Operation and Maintenance Plan (see Condition 10 above). B. Conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of 40 CFR 60, Appendix A. The performance test must be conducted while the affected source is in operation. 1. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, you must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. 2. If no visible emissions are observed during the semi-annual test for any affected source, you may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests. 3. 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 of 40 CFR 60, Appendix A. The Method 9 performance test must begin within 1 hour of any observation of visible emissions. C. Conveying system transfer points: 1. 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. 2. If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must conduct a Method 22 performance test according to the requirements of Item B above for each such conveying system transfer point located within the building, or for the building itself, according to Item D below. D. If visible emissions from a building are monitored, the requirements of Item A above apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.	63.1350(f)
13.	**Visible Emissions Monitoring – Finish Mills** A. Daily Visible Emissions Observations: 1. Monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of 40 CFR 60, Appendix A. The duration of the Method 22 performance test must be 6 minutes. 2. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test. B. Prompt Corrective Actions: 1. If visible emissions are observed during any Method 22 visible emissions test conducted under Item A above, initiate, within one-hour, the corrective	63.1350(f)

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	actions specified in your operation and maintenance plan as required in §63.1347. C. Consecutive observations of VE: 1. If visible emissions are observed during the follow-up Method 22 performance test from any stack, conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of 40 CFR 60, Appendix A. The duration of the Method 9 test must be 30 minutes. D. In lieu of conducting daily Method 22 testing, the permittee may install and operate a COMS or bag leak detection system (BLDS) on any raw or finish mill according to the provisions of 40 CFR §63.1350(f)(4). E. Monitoring provisions for these sources must be included in the Subpart LLL Operation and Maintenance Plan (see Condition 10 above).	
14.	**Opacity Tests for Initial Compliance (New Sources and After Major Repairs)** Conduct opacity tests in accordance with Method 9 of 40 CFR 60, Appendix A. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the following conditions apply. A. There are no individual readings greater than 10 percent opacity; B. There are no more than three readings of 10 percent for the first 1-hour period. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.	63.1349(b)(2)
	Recordkeeping	
15.	The permittee shall maintain the following records: A. To enable annual emissions reporting: 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); 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 40 CFR 63, Subpart LLL: 1. Files of all information (including all reports and notifications) required by Subpart LLL recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1); 2. All documentation supporting initial notifications and notifications of compliance status under §63.9; 3. All records of applicability determination, including supporting analyses; 4. All records required by §63.10(c) for each continuous monitoring system; 5. Records of the daily clinker production rates according to the clinker production monitoring requirements in §63.1350(d); 6. Records of the date, time and duration of each startup or shutdown period for the kiln, and the quantity of feed and fuel used during the startup or shutdown period; 7. Records of the date, time and duration of each malfunction that causes an affected source to fail to meet an applicable standard; if there was also a monitoring malfunction, the date, time and duration of the monitoring malfunction; the record must list the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the standard	10.1.7 18.5.3(b) 18.7.1 63.1355

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	for which the source failed to meet a standard, and a description of the method used to estimate the emissions; 8. Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and 9. For each exceedance from an emissions standard or established operating parameter limit, you must keep records of the date, duration and description of each exceedance and the specific actions taken for each exceedance including inspections, corrective actions and repeat performance tests and the results of those actions.	
	Periodic Reporting	
16.	**Semi-Annual Reporting** The following information shall be reported for each semiannual period: A. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions; B. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted; C. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of the system repairs or adjustments; D. When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired or adjusted, such information shall be stated in the report; and E. For excess emissions and continuous monitoring system performance reports and summary reports as required by 63.10(e)(3); emissions and parameter monitoring exceedances are defined in the relevant standards. The permittee of an affected source required to install a CMS by a relevant standard shall submit an excess emissions and continuous monitoring system performance report and/or a summary report to the Department semiannually. F. For each affected source equipped with a continuous emission monitor, 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 as required by§63.10(e)(3). G. If the total continuous monitoring system downtime for any CEM or any CMS for the reporting period is 10 percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report. H. All reports required by this subpart not subject to the requirements in 40 CFR §63.1354(b)(9) introductory text and §63.1354(b)(11)(i) must be sent to the Administrator at the appropriate address listed in §63.13. The Administrator or the delegated authority may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports subject to 40 CFR §63.1354(b)(9) introductory text and §63.1354(b)(11)(i) in paper format.	18.5.3 63.1354(b)(8) 63.1354(b)(10) 63.1354(b)(12)

No.	Federally Enforceable Conditions for Other Sources Subject to 40 CFR 63, Subpart LLL	Regulations
	I. Submit a summary report semiannually within 60 days of the reporting period to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (*https://cdx.epa.gov/*). Use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the extensible markup language (XML) schema listed on the CEDRI website (*https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri*), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report the Administrator at the appropriate address listed in §63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. The excess emissions and summary reports must be submitted no later than 60 days after the end of the reporting period, regardless of the method in which the reports are submitted. The report must contain the information specified in §63.10(e)(3)(vi) and the following: a. All exceedances of maximum control device inlet gas temperature limits specified in §63.1346(a) and (b); b. Notification of any failure to calibrate thermocouples and other temperature sensors as required under §63.1350(g)(1)(iii) of this subpart. c. Notification of any failure to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1346(c)(2). d. Notification of failure to conduct any combustion system component inspections conducted within the reporting period as required under §63.1347(a)(3). e. Any and all failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1347(a) f. For each PM CPMS, HCl and THC CEMS, SO_2 CEMS, or Hg sorbent trap monitoring system, within 60 days after the reporting periods, you must report all of the calculated 30-operating day rolling average values derived from the CPMS, CEMS, CMS, or Hg sorbent trap monitoring systems. g. 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.	63.1354(b)(9)
17.	**<u>Annual Emissions Reporting (JCDH Requirement)</u>** The permittee shall include the following information for the previous calendar year in the annual emissions report as the basis for emissions calculations: A. Quantity (throughput) and type of material stored in each silo (short tons); B. Quantity (throughput) and type of material stored in open piles (short tons); C. Quantity (throughput) and type of material conveyed at each controlled transfer point (short tons); D. Quantity (throughput) and type of material processed at each finish mill (short tons); E. Quantity (throughput) and type of material conveyed at each loading or bagging point (short tons); and F. Total hours of operation each listed emission unit within this section.	1.5.15 1.9.2 18.7.1 18.5.3

FEDERALLY ENFORCEABLE CONDITIONS FOR EMERGENCY GENERATOR

Emissions Unit No.	Emissions Unit Description
062	Emergency Generator: Rotary Kiln Auxiliary Drive Engine – Caterpillar 3306 – 227 hp Diesel

No.	Federally Enforceable Conditions for Emergency Generator	Regulations
1.	**Applicability** The generator is subject to Part 6.1 of the Rules and Regulations and to 40 CFR 63, Subpart ZZZZ, "National Emissions Standards for Hazardous Air Pollutants for stationary Reciprocating Internal Combustion Engines" (RICE NESHAP).	63.6585
2.	**Visible Emissions** 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. 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.	6.1.1 18.5.3
3.	**Fuel Restrictions** The permittee shall combust only diesel fuel in the compression ignition (CI) engine. Compliance with this provision will serve as 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.	18.2.4
4.	**Restrictions on Non-Emergency Use** There is no time limit on the use of emergency stationary RICE in emergency situations as specified in §63.6640(f)(1). The permittee shall comply with the restrictions on non-emergency use from the applicable subpart for each emergency stationary RICE, including any amendments to or court decisions affecting these rules from the effective date. The permittee shall limit the non-emergency operations of the engine as follows: A. Maintenance checks and readiness testing for a maximum of 100 hours per year as specified in §63.6640(f)(2)(i); and B. Certain non-emergency situations for up to 50 hours per year as specified in §63.6640(f)(3). All hours of operation under this provision also count toward the maximum of 100 hours provided for maintenance checks and readiness testing. Any engine that does not comply with the non-emergency use restrictions shall comply with the requirements for non-emergency engines under the applicable subpart(s) and the permittee shall notify the Department of any change in engine service.	63.6675 63.6640(f)

No.	Federally Enforceable Conditions for Emergency Generator	Regulations
5.	**Additional Requirements for Subpart ZZZZ** The additional requirements of Subpart ZZZZ for existing (constructed before June 12, 2006) emergency stationary CI engines less than 500 hp located at a major source of emissions include: A. General Duty to Minimize Emissions: At all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. B. Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. C. Comply with the following work practices or an alternative work practice plan approved by EPA pursuant to §63.6(g): 1. Change oil and filter every 500 hours of operation or annually, whichever comes first, or utilize an oil analysis program as described in 63.6625(i); 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. D. A non-resettable hour meter is required and shall be used to maintain records of the hours and purpose of operation of each engine to demonstrate compliance with the limitations on non-emergency operation. E. Maintain records of all required maintenance and records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b). F. Compliance with Subpart A of 40 CFR 63 is not required.	63.6590(a)(1)(ii) 63.6605 63.6602 Subpart ZZZZ, Table 2c 63.6670(c)(1) 63.6625(f) 63.6655(f) 63.6655(a) 63.6655(e) 63.6665
6.	**Recordkeeping** The permittee shall maintain the following records: A. Hours of operation for the engine; B. Records of the purpose of each operation of each engine to demonstrate compliance with the restrictions on use other than for emergency operation; C. Records to document the type of fuel used and the sulfur content of fuel used by each engine; D. Time, date and duration of malfunctions, including whether the equipment the control device is intended to control was operating and any corrective actions taken; E. Time, date, total engine hours operated, and name of person(s) performing each inspection; F. Time, date, name of observer for visible emissions observations; and G. Time, date, total engine hours operated, and name of person(s) performing maintenance, corrective actions and repairs.	1.9.1 18.5.3
7.	**Annual Emissions Reporting (JCDH Requirement)** The permittee shall maintain the records required by Condition 5 above and include the following information for each generator in the annual emissions report as the basis for emissions calculations: A. The actual hours of operation of the engine for the previous calendar year; and B. 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.	1.5.15 18.5.3 1.9.2 18.7.1

APPENDIX A: CROSS-REFERENCE TABLE: JCDH 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 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[1]	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	Permit Procedures
Part 2.3	Section 335-3-14-.03	Standards for Granting Permits
Part 2.4	Section 335-3-14-.04[2],[3]	Air Permits Authorizing Construction in Clean Air Areas [Prevention of Significant Deterioration (PSD)]
Part 2.5	Section 335-3-14-.05[4]	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
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**

[1] Revisions of the definition of VOC to exclude *trans* 1-chloro-3,3,3-trifluoroprop-1-ene (Solstice™ 1233zs(E)), 2,3,3,3-tetrafluoropropene, and 2-amino-2-methyl-1-propanol (AMP) have not been approved into the SIP.

[2] Revisions to the following provisions have not been approved as SIP changes by EPA: the permitting applicability statement for greenhouse gases at ADEM 335-3-14-.04(1)(k) (JCDH 2.4.1(k)) and the definition of replacement unit at ADEM 335-3-14-.04(2)(bbb) (JCDH 2.4.2(bbb)).

[3] As of Sept. 26, 2012 Section 335-3-14-.04 does not include Alabama's revision to adopt the $PM_{2.5}$ SILs threshold and provisions (as promulgated in the October 20, 2010 $PM_{2.5}$ PSD Increment-SILs-SMC Rule at 40 CFR 1.166(k)(2) and the term "particulate matter emissions" (as promulgated in the May 16, 2008 NSR $PM_{2.5}$ Rule (as 40 CFR 51.166(b)(49)(vi)).

[4] The following provisions are not part of the EPA-approved SIP: the portion of 335-3-14-.05(1)(k) (JCDH 2.5.1(k)) stating "excluding ethanol production facilities that produce ethanol by natural fermentation"; 335-3-14-.05(2)(c)3. (JCDH 2.5.2(c)(3)) which addresses fugitive emission increases and decreases; 335-3-14-.05(1)(h) (JCDH 2.5.1(h)) stating the actual-to-potential test for projects that only involve existing emissions units; the last sentence at 335-3-14-.05(3)(g) (JCDH 2.5.3(g)), stating "Interpollutant offsets shall be determined based on the following ratios"; and the NNSR interpollutant ratios at 335-3-14-.05(3)(g)1.-4. (JCDH 2.5.3(g)(1)-(4)).

JCDH Citation	State Citation	Title/Subject
Sections 5.1.1 – 5.1.5[1]	Section 335-3-3-.01	Open Burning
Part 5.2	Section 335-3-3-.02	Incinerators
Part 5.3[2], 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**
Sections 6.1.1 & 6.1.2	Section 335-3-4-.01[3]	Visible Emissions
Part 6.2	Section 335-3-4-.02[4]	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[5]	Section 335-3-4-.05	Small Foundry Cupola
Part 6.6[6]	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
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-.14	Grain Elevators
No equivalent provision	Section 335-3-4-.15	Secondary Lead Smelters
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
Chapter 8	**Chapter No. 335-3-6**	**Control of Volatile Organic Compound Emissions**
Part 8.1[7]	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[8],[9]	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
Part 8.7, except 8.7.4(b) & 8.7.5(e)	Section 335-3-6-.30	Gasoline Dispensing Facilities Stage 1
Part 8.11	Section 335-3-6-.32	Surface Coating
Part 8.12	Section 335-3-6-.33[10]	Solvent Metal Cleaning
Part 8.13	Section 335-3-6-.34	Cutback and Emulsified Asphalt
Part 8.15	Section 335-3-6-.36	Compliances Schedules
Part 8.16[11]	Section 335-3-6-.37	Test Methods and Procedures
Part 8.18	Section 335-3-6-.39	Manufacture of Synthesized Pharmaceutical Products

[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] 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."

[3] ADEM 335-3-4-.01(1) & (2) are included in the EPA-approved SIP, however, the remaining provisions are not SIP-approved.

[4] ADEM 335-3-4-.02(4) was removed effective July 15, 1999, however, the provision is still included in the EPA-approved SIP.

[5] 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.

[6] 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.

[7] The definition at ADEM 335-3-6-.24(2)(d) is located at JCDH Part 1.3.

[8] The EPA-approved SIP excludes only 11 compounds from the definition of VOC at ADEM 335-3-6-.26(1) (JCDH 8.3.1). The SIP-approved exemptions are listed in ADEM 335-3-1-.02(1)(gggg)(JCDH Part 1.3) as numbered exemptions 1-10 and 20).

[9] 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)).

[10] ADEM 335-3-6-.33(5)(n) (JCDH 8.12.5(n)) is not included in the approved SIP.

[11] 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 are located at ADEM 335-3-6-.37(13).

JCDH Citation	State Citation	Title/Subject
Part 8.20, except 8.20.8	Section 335-3-6-.41	Leaks from Gasoline Tank Trucks and Vapor Collection Systems
Part 8.22	Section 335-3-6-.43[1]	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
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[2]	Manufacture of Laminated Countertops
Part 8.29	Section 335-3-6-.50	Paint Manufacture
Part 8.23[3]	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[4]	New Combustion Sources
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
Part 11.6	Section 335-3-9-.06	Other Prohibited Acts
Part 11.7	Section 335-3-9-.07	Effective Date
Chapter 17	**Chapter No. 335-3-15**	**Synthetic Minor Operating Permits**
Part 17.1	Section 335-3-15-.01[5]	Definitions
Part 17.2, except 17.2.8(h)(7)	Section 335-3-15-.02[6]	General Provisions
Part 17.3	Section 335-3-15-.03	Applicability
Part 17.4[7]	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[8]	Transportation Conformity
Part 19.2	Section 335-3-17-.02	General Conformity

[1] The following provisions are not included in the EPA-approved SIP: the last 4 sentences of ADEM 335-3-6-.43(1)(c) (JCDH 8.22.(c)), provision ADEM 335-3-6-.43(1)(f) (JCDH 8.22.1(f)) and all provisions of ADEM 335-3-6-.43(5) & (6) (JCDH 8.22.5 and 8.22.6).

[2] Current ADEM 335-6-.49(4) & (5) (JCDH 8.28.4 and 8.28.5) are not included in the EPA-approved SIP. The SIP-approved version of ADEM 335-6-.49(4) (JCDH 8.28.4) is "Compliance with this Rule shall be demonstrated via certification by the adhesive manufacturer as to the composition of the adhesive, if supported by actual batch formulation records. Sufficient data to determine as-applied formulation is different from the as-purchased adhesive."

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

[4] ADEM 335-3-8-.05 was approved into the SIP as ADEM 335-3-8-.14 but was renumbered when CAIR provisions were removed.

[5] Only the first sentence of ADEM 335-3-15-.01(g) is approved into the SIP. JCDH does not include the unapproved language.

[6] ADEM 335-3-15-.02(10) is not included in the EPA-approved SIP. JCDH does not include the unapproved provision.

[7] JCDH Part 17.4 does not include the federally enforceable provisions of ADEM 335-3-15-.04(1)(g) and (3)(c).

[8] The reference to July 1, 2012 in ADEM 335-3-14-.01 and JCDH Part 19.1.1 has not been approved into the SIP.