ADEQ
OPERATING
AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 75-AOP-R7
Renewal #1
IS ISSUED TO:
Ash Grove Cement Company
4457 Highway 108
Foreman, AR 71836
Little River County
AFIN: 41-00001

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

AND

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

Date

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Appendix H - Plant Haul Road Fugitive Dust Control Plan
Appendix I – 40 CFR Part 63, Subpart EEE Requirements

List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO_x	Nitrogen Oxide
PM	Particulate Matter
PM10	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO_2	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

This permit represents two operating scenarios.

Scenario I: Pyroprocess Unit (beginning on page 7)

Scenario II: Three Kiln Configuration (beginning on page 170)

The conditions of scenario II shall apply to Ash Grove until the Pyproprocess Unit has completed startup and come online. At this time, Ash Grove shall cease operation under scenario II and begin operations solely based on the conditions listed under operating scenario I.

Pyroprocess Unit Operating Scenario

SECTION I: FACILITY INFORMATION

PERMITTEE:	Ash Grove Cement Company
AFIN:	41-00001
PERMIT NUMBER:	75-AOP-R7
FACILITY ADDRESS:	4457 Highway 108 Foreman, AR 71836
MAILING ADDRESS:	4457 Highway 108 Foreman, Arkansas 71836
COUNTY:	Little River
CONTACT POSITION:	Dan Peterson, Plant Manager
TELEPHONE NUMBER:	(870) 542-6217
REVIEWING ENGINEER:	Wesley Crouch
UTM North South (Y):	Zone 15: 3728.9
UTM East West (X):	Zone 15: 368.35

SECTION II: INTRODUCTION

Summary of Permit Activity

Ash Grove operates a portland cement plant located at 4457 Hwy 108 West in Foreman, Arkansas 71836. This is the first renewal of the Title V permit for this facility. This modification will allow Ash Grove to construct a new dry-process preheater/precalciner (PH/PC) cement kiln system at this facility as a modernized replacement for the three existing wet-process cement kilns.

Currently, the three existing kilns have a combined nominal clinker production capacity of 114 tons per hour, or approximately 1 million tons per year. The replacement kiln system will increase clinker production to 194 tons per hour annual average with a maximum daily production level of 5,300 tons and a design maximum clinker production rate of 1,697,250 tons. The modified plant will have an annual portland cement production capacity of 2,500,000 tons, which includes the milling of clinker that has been manufactured offsite. Operational units to accommodate the increased level of production include a vertical roller mill, components of the pyroprocessing system (5-stage preheater, low-NO_x precalciner, rotary kiln, and bypass system), coal mill, and finish mill. Additional raw material, coal, and cement storage, including the necessary material handling systems, will also be constructed. Key process components include the raw material and fuel feed systems, pyroprocessing system, and air pollution control devices.

Ash Grove plans to begin construction in the first quarter of 2007. It is anticipated that the project construction will take approximately 20 months to complete, with startup of the replacement kiln system in July of 2009.

Process Description

For informational purposes only, this section does not contain enforceable conditions.

The three wet-process rotary kilns currently operating at the Foreman plant utilize the same raw materials that will be used in the new system. The carbonate source, chalk, is mined on-site utilizing surface miners and subsequently transported by belt conveyor located in the quarry to the processing portion of the facility. Chalk may also be processed through an initial crushing operation in the quarry (i.e., primary crusher) and then moved by conveyor belt into the existing raw material storage building. The raw materials are currently ground in the existing raw mills, then combined with water and mixed in one of six slurry tanks.

As slurry passes through a kiln, it is dried, then calcined, and finally heated to the fusion point (~2,700ºF) where clinker results. Clinker is discharged to a clinker cooler where it is cooled to approximately 250ºF and then conveyed to bulk storage. It is then sent to the finish mills, blended with gypsum or other admixtures, and finely ground to make cement.

The source of heat energy in the kilns is the combustion of conventional fuels such as pulverized coal, natural gas, and fuel oil. The kilns also use hazardous and nonhazardous waste-derived

fuels through pumpable and non-pumpable feed systems as liquid waste-derived fuels (LWDF), solid waste-derived fuels (SWDF), and tire-derived fuels (TDF) as substitutes to conventional fuels. Non-hazardous waste materials are also used as a raw material substitute for silica, alumina, and iron in the slurry.

The new pyroprocessing system will be a dry process, PH/PC system. A bridge-type scraper reclaimer will transfer chalk from the new raw material storage building into new raw material storage bins prior to the new roller mill, which will be used to pulverize the chalk, sand, iron ore, and other raw materials. The raw material stream (raw meal) leaving the new roller mill will be conveyed from the roller mill, collected by the cyclones and baghouse, then conveyed to a new dry kiln feed blending and storage silo, where it will be stored prior to introduction to the pyroprocessing system. In addition to retaining some of the existing raw material handling and storage equipment, AGC will be constructing a new raw material storage building, four new raw material storage bins, a limestone bin, and a gypsum bin with associated conveyors and material-handling equipment.

The facility's equipment design will allow AGC to continue using available fuels including fossil fuels and non-hazardous and hazardous waste fuels. Coal, petroleum coke, natural gas, fuel oil, used oils from both on and off-site, tires, other non-hazardous fuels, LWDF, and SWDF will be used as the primary fuels for the cement manufacturing process. AGC also plans to begin using bulk waste derived fuel (BWDF), both hazardous and non-hazardous. These may include wastes such as spent pot liner from the aluminum production industry. Conventional fuels will be used as a primary fuel in certain situations, such as during startup.

The PH/PC pyroprocessing system is a state-of-the-art design that features a five-stage cyclone-type preheater string, low-NO_x precalciner (with a combustion chamber), and rotary kiln. The low-NOx PH/PC portion of the system will be located in a tower adjacent to the kiln. See Figure 1-1. The precalciner allows the burning fuel to be intimately mixed with the kiln feed. Pre-heated air from the clinker cooler (tertiary air) will provide combustion air to the precalciner. PH/PC kilns feature greater thermal efficiency as compared to long dry or long wet kilns, which results in significantly lower emissions and decreased fuel consumption; approximately 3.0 MMBTU per ton of clinker or half the energy needed in the current system. To increase energy efficiency even further, hot exhaust gases from the preheater tower and cooler will be utilized to dry kiln feed in the raw mill and coal in the new coal mill. All clinker cooler exhaust gases will be utilized by the pyroprocessing system. The majority of the cooler gases will be utilized by the in-line raw mill. Therefore, there will not be a clinker cooler baghouse or stack. The coal will be dried in the coal mill by gases from the preheater. The coal mill gas will pass through a baghouse and then vent to the main stack. The existing raw material building will be converted to store coal, petroleum coke, limestone, and gypsum, and a new coal silo and coal mill will be constructed. The equipment designated for handling, storing, and milling coal will also be used for petroleum coke and other similar alternate fuels. A new emergency generator will be installed to power key equipment during power outages.

The exhaust gas from a kiln system is comprised of combustion by- products, cement kiln dust (CKD), alkali salts, carbon dioxide, water vapor, and excess air. The main exhaust gases from

the proposed system will exit from the top of the preheater tower and pass through the in-line raw mill and main air pollution control device (APCD) before being emitted through a single stack. Bypass gases will exit the feed end of the rotary kiln prior to the precalciner and be conditioned by a separate bypass system APCD, then vented through the main kiln stack. The purpose of an alkali/chlorine bypass is to remove volatile salts and other impurities from the pyroprocessing system, thereby preventing their buildup in the kiln system and in the product. Low alkali product is critical since it is required for Arkansas Department of Transportation contracts.

CKD is inherently generated as a by-product of the cement production process. CKD is finely ground and partially calcined raw feed that becomes entrained in the combustion gases due to the high velocity of the gas and the tumbling motion of the material in the kiln system. The particles consist of raw materials, partially calcined material (lime), and volatile inorganic salts (e.g., sodium and potassium chloride and sodium and potassium sulfate). CKD will be collected in the main and bypass baghouses. The bypass CKD will be pneumatically conveyed to storage silos, and then removed by truck for beneficial use or disposal. All CKD disposed on-site will be wetted in a pug mill prior to disposal. The dust collected in the main baghouse will be reintroduced to the preheater tower as part of the kiln feed inlet stream, which is expected to significantly reduce the amount of CKD disposed or beneficially reused off-site

The cooled clinker will be processed in the clinker grinding system. The clinker grinding system will be comprised of the two existing ball mills, a new vertical cement mill, material bins and feeders, a high-efficiency separator, dust collectors, and material handling equipment. The clinker will be mixed with gypsum, chalk, and/or other additives, and then ground into portland cement. The finished product will be conveyed into storage silos and subsequently loaded into trucks and railcars for shipment to customers. Additional storage and load-out operations, including two clinker bins and five cement silos (including interstices); will be added to accommodate the increased annual production.

Prevention of Significant Deterioration (PSD)

Netting Analysis

Pollutant	Baseline Years	Baseline Emissions (ton/year)	New Potential Emissions (tons/year)	Net Emissions Change (tons/year)	Significant Emission Level (tons/year)	Subject to PSD Review (Yes/No)
PM_{10}	2003/2004	385 [a,b]	251 [b,c]	-134.0	15.00	No
SO_2	1996/1997	2759 [d]	2700 [c]	-59.0	40.00	No
NO_x	2003/2004	3932 [d]	2975 [c]	-957.0	40.00	No
VOC	2003/2004	40 [d]	138 [c]	98.0	40.00	Yes
CO	2003/2004	641 [d]	1727 [c]	1086.0	100.00	Yes

Lead Compounds		0.8989	0.2891 [e]	-0.6098	0.60	No
Fluorides		N/A [f]	N/A [f]	N/A	3.00	No
Sulfuric Acid Mist		N/A [f]	N/A [f]	N/A	7.00	No
Hydrogen Sulfide		N/A [f]	N/A [f]	N/A	10.00	No
Reduced Sulfur		N/A [f]	N/A [f]	N/A	10.00	No

a. Emissions based on stack tests
b. Emissions based on AP-42 emissions factors.
c. Emissions based on vendor guarantee.
d. Emissions based on continuous emissions monitoring system data.
e. Emissions based on stack test at similar plant (Chanute).
f. Indicates that no emission factor is available.

BACT Analysis

BACT is defined as an emission limitation based on the maximum degree of pollutant reduction determined on a case-by-case basis taking into account technical, economic, energy, and environmental considerations. 40 CFR Part 52 requires that a BACT determination be incorporated as part of the pre-construction permit review process for all pollutants regulated under the CAA that are emitted in significant amounts from new or modified major sources.

To bring consistency to the BACT determination process, USEPA developed a guidance document recommending the use of a "top-down" approach to BACT determinations. The first step in a top-down BACT analysis is to determine, for the pollutant in question, the most stringent control technology available for a similar source or source category. If this level of control is not feasible on the basis of technical, economic, energy, and environmental impacts for the source in question, then the next most stringent level of control is identified and similarly evaluated. This process is continued until the emission level or technology under consideration is determined to be feasible.

The plant modernization is expected to result in significant increases in CO and VOC emissions. Therefore, a best available control technology (BACT) determination is required for each of these pollutants as part of the PSD application. The emission points for the in-line kiln/raw mill, clinker cooler, and coal mill will be combined into one (the main) stack and will be considered concurrently in the BACT analysis.

The first step in the BACT top-down approach is to identify potential control technologies for CO. Potential control technologies for CO in the cement manufacturing industry include good combustion practices (GCP), mixing air fan, raw material substitution and selective quarrying, thermal oxidation, and catalytic oxidation. Each of these technologies was evaluated for technical feasibility.

Good Combustion Practices

Since CO formation is a result of incomplete fuel combustion, lower emissions will be generated with optimum combustion practices. When manufacturing a bulk commodity like portland cement, the production of a quality product at the lowest possible cost is stressed. The cost of fuel represents a substantial part of the cost of manufacturing cement. Optimum, uniform combustion in the pyroprocess minimizes fuel consumption. Every unit of excess air introduced into the system requires needless fuel consumption and cost to heat it. A cement manufacturer has a vested interest in effective control of combustion practices.

AGC intends to employ any available practices that will maintain good combustion in the kiln while producing good quality clinker. The design of the plant itself incorporates a preheater tower, a low-NOx precalciner, an in-line raw mill, reuse of clinker cooler gas in the raw mill, reuse of preheater gas in the coal mill, and many other features specifically intended to promote good combustion practices and reduce energy consumption. GCP includes those steps necessary to extract the maximum useable thermal energy from fuels while generating a minimum quantity of pollutants.

The Foreman plant will be equipped with the most modern and sophisticated process control computers and systems currently available to monitor, control, and evaluate raw materials, fuels, and the manufacturing process. System operators and supervisors will be fully trained in the use of process control systems to optimize all phases of plant operation, including combustion. GCP is considered as a technically feasible BACT for CO control and is included in the base case scenario.

Mixing Air Fan

High-pressure air in the range of a 2-10 percent replacement of the primary combustion air can be injected through the shell of the rotary kiln near its feed end in a preheater/precalciner kiln system to provide additional oxygen to the post-combustion flue gas to meet stoichiometric requirements and the kinetic energy necessary for the adequate mixing of flue gas within the kiln. Any residual CO from the main flame in the burning zone of the rotary kiln will pass through the multi-stage combustion process in the calciners. Because the CO from the rotary kiln will be oxidized in the final phase of multi-stage combustion, the concentration of CO in the flue gas from the rotary kiln is irrelevant. A mixing air fan on the Foreman kiln is an unnecessary application of this technology that would result in a negligible reduction in CO emissions. A mixing air fan is redundant and unnecessary for the Foreman kiln system and is, therefore, infeasible.

Raw Material Substitution and Selective Quarrying

Raw material substitution and selective quarrying have been considered technically feasible CO emissions control technologies when the quarry has specific rock formations with higher organic content than the bulk of the material. In certain cases, deposits of higher organic concentration

material can be discarded and replaced with acceptable alternative raw materials bearing lower concentrations of organic constituents. This would reduce, to some degree, a source of CO emissions in the system. However, the types of geological formations required to gain benefit from selective quarrying do not exist in the Foreman quarry. Therefore, selective quarrying is not considered technically feasible for this particular plant.

Thermal Oxidation

Thermal oxidation is performed with devices that use an open flame or combustion within an enclosed chamber to oxidize pollutants. Thermal oxidizers typically operate at temperatures that range from 1,200°F to 2,000°F, with a residence time of up to 2 seconds. By raising the temperature, the residence time for complete combustion can be reduced, or, alternatively, by increasing the residence time, the temperature can be reduced.

For the purpose of this BACT evaluation, a price quote from Durr Environmental Inc. (Durr) was used for an RTO on a similar cement manufacturing operation. The RTO is expected to recover about 75 percent of the heat on an annual basis considering the gradual degradation in the effectiveness of the heat transfer media. Compared to other types of oxidizers, this would substantially reduce the natural gas usage; therefore, it is the preferred oxidation alternative. The oxidation temperature of the RTO process is in the range of 1,500°F to 1,800°F. The RTO technology also has the lowest reported NOx emissions.

The exhaust gas enters the RTO system through a forced-draft fan. The inlet heat transfer bed of ceramic media preheats the gas stream prior to the combustion phase. In the combustion chamber that is equipped with a natural gas burner, up to 98 percent of the CO is destroyed. The purified exhaust gas preheats a second heat transfer bed and exits through the diverter valve.

The control efficiency that can be achieved by the RTO depends on the inlet pollutant concentration. In the case of CO, where the pollutant inlet concentration will be approximately 193 ppmv, a 98 percent control efficiency may be high, but will be considered for this analysis.

Ideally, a thermal oxidation system for cement kiln applications requires the installation of a wet lime scrubber (WLS) upstream of the RTO. While the scrubber provides backup PM control to help reduce fouling of the heat transfer media, its main purpose is to decrease the SO2 concentration entering the RTO, thereby minimizing the oxidation of SO2 to SO3 in the RTO. The concentration of SO3 in the flue gas that would exist without the WLS would likely result in a visible plume with an opacity that would exceed the MACT standard.

Even with the upstream PM control, deposition of solids on the fans and the heat transfer media could create serious operating problems and reduce thermal efficiency. Clogging of the heat transfer media could be especially problematic. As material deposits on the ceramic heat transfer medium, the heat transfer efficiency decreases. As the transfer efficiency decreases, the supplemental fuel requirements increase. Concerns with particulate emissions mandate that the oxidizer be located downstream of the baghouse. If a WLS is installed, the temperature of the gas stream that exits the wet scrubber will be around 134°F. Reheating the air to 1,600°F or higher

will require significant amounts of fuel. Also, the effluent leaving the WLS would need to be treated before disposal or reuse. However, in order to simplify this BACT analysis, the evaluation is based solely on the installation of an RTO for CO control.

Another adverse secondary impact from the thermal oxidizer is additional sulfuric acid generation. The gas entering the oxidizer will contain both SO_2 and water. Some of the SO_2 will be oxidized to SO_3 that will then combine with water to form sulfuric acid. The acid will be detrimental to both the oxidizer itself and to the environment after it is released. The amount of sulfuric acid generated would be minimized by the application of the WLS.

Since suppliers do not manufacture an individual thermal oxidizer unit for the treatment of 690,000 acfm (467,000 scfm) of exhaust gas, multiple units will be required. Operation of multiple units will create significant operating difficulties in trying to balance flow among several units, as well as concerns about increased maintenance requirements. According to Durr, each of its RTO units can process approximately 60,000 scfm. A system suitable for the proposed Foreman kiln would require eight units, plus one backup unit for times of maintenance and malfunction.

AGC is aware of two combined WLS and RTO systems that were installed on cement plants. One of the systems is installed on a preheater/precalciner cement plant operated by TXI in Midlothian, Texas. The facility installed the combined control device system, not as a result of a BACT analysis, but to avoid PSD review during a plant expansion. The system was designed to reduce emissions that are attributed to raw materials containing high organic constituents. By installing the system consisting of eleven RTO units, the plant was expected to significantly increase production while not increasing CO emissions. However, the facility has been experiencing performance problems with the RTO that include fouling and static pressure loss in the system. TXI petitioned the Texas Commission on Environmental Quality (TCEQ) for approval to remove the RTO system using a BACT analysis (submittal dated March 12, 2004). The current cost of natural gas has made operating the system economically infeasible. After negotiations, TXI entered into an agreement with TCEQ whereby they will continue to operate the RTO, but with a higher allowable emission rate. The higher emission rate will reduce RTO operating costs. However, the unit is not a BACT unit.

The other combined WLS and RTO system was installed on two long wet kilns at the Holcim cement plant in Dundee, Michigan. The combined system was installed to reduce opacity and odors relating to extremely high organic and sulfur emissions. It should be noted that this plant has annual SO_2 emissions on the order of 10,000 tons and the exhaust gas organics are estimated to provide up to 90 percent of the RTO fuel requirements. Holcim has not published any information regarding RTO operations at the Dundee plant. However, AGC understands that the plant has been experiencing problems with fouling and static pressure loss that result in high maintenance costs and increased down time.

For the purpose of this BACT evaluation, the RTO system is considered technically feasible for reducing CO emissions. However, the overall environmental benefit, taking into account

economic, environmental, energy, and other factors, of implementing such a system on this process is not justifiable under the BACT guidelines, as discussed below.

Catalytic Oxidation

Catalytic oxidation is performed with devices that utilize a flame within an enclosed chamber. A catalytic oxidizer operates effectively within a temperature range between 600°F and 900°F. The catalyst is typically composed of platinum. The presence of the catalyst allows oxidation of pollutants at a temperature lower than that required for thermal oxidation, which minimizes fuel costs. The oxidation temperature is maintained through the use of supplemental fuel.

Catalytic oxidizers are primarily used to treat exhaust gas streams that contain a low concentration of PM, such as exhaust streams from painting operations. The presence of PM inhibits the treatment by poisoning the catalyst.

Advantages of catalytic oxidizers over thermal oxidizers include lower fuel requirements, lower operating temperatures, and reduced fire hazards due to the lower temperatures. Disadvantages of the catalytic oxidizers include higher capital costs, catalyst poisoning, spent catalyst disposal, which can be classified as a hazardous waste and the fact that catalytic oxidation has not been applied to a cement kiln.

Although operating temperatures for catalytic oxidizers are lower than those for thermal oxidizers, some reheating is still required to bring flue gas temperatures up from less than 400°F to at least 600°F. For this, additional fuel (i.e., natural gas) must be combusted, resulting in increased NOx emissions.

Catalytic oxidation systems are sensitive to fouling by certain species of PM that may be present in the flue gas from the Foreman kiln. Even PM in the post-baghouse exhaust gas stream will eventually poison the catalyst; thereby causing lost treatment efficiency and premature failure of the catalyst. The catalyst will promote the conversion of SO2 to SO3, thereby creating an exhaust stream with the potential to exceed the opacity standard.

The spent catalyst is often classified as a hazardous waste. Disposal of a hazardous waste can represent a significant environmental concern. Due to the expected limited life of the catalyst and the resulting operational unreliability, as well as the catalyst disposal concern, and the fact that catalytic oxidation has not been applied to a cement kiln, the use of catalytic oxidation is considered an infeasible control option and does not merit further consideration in the BACT analysis.

The RTO and GCP were the only technically feasible options out of all control methods considered. However, an RTO has a control cost of $11,397 per ton CO removed and is considered economically infeasible.

Based on the BACT analysis for CO, AGC is proposing to use good combustion practices (GCP) for controlling CO emissions from the new Foreman plant. AGC is proposing an emission limit

derived from vendor guarantees of 2500 pounds CO per hour, 8-hour average as BACT for CO emissions from the Foreman plant. This limit is comparable to BACT limits for similar facilities.

BACT Analysis for VOC

The sources of VOC emissions associated with the proposed project are the pyroprocessing system and the coal mill. VOC emissions will be generated by volatilization and pyrolysis of high molecular weight organic compounds present in the raw feed to the kiln, incomplete combustion of fuels in the preheater, and coal grinding. Emissions from the kiln and coal mill will be considered together for this BACT analysis. This is because the kiln and coal mill emissions will vent through a common stack.

Potential control technologies for VOC in the cement manufacturing industry include GCP, raw material substitution and selective quarrying, thermal oxidation, and catalytic oxidation. Each of these technologies was evaluated for technical feasibility.

Good Combustion Practices

The combustion of fuels in a properly designed kiln that is operated using GCP will result in only a small quantity of VOC emissions. The majority of VOC emissions are from the volatilization of organics in the raw feed in the upper stages of the preheater. Since the gas flow direction in the preheater is from the precalciner toward the stack, no further combustion zones are available downstream to destroy the volatilized organics. Therefore, GCP has no effect on the VOC emissions generated from this portion of the kiln system.

The Foreman kiln will be designed in accordance with GCP. This will ensure that VOC will be destroyed from fuels and materials passing through the precalciner and kiln portions of the pyroprocessing system. Thus, GCP is considered to establish the baseline upon which other controls will be evaluated.

Raw Material Substitution and Selective Quarrying

The types of geological formations required to gain benefit from selective quarrying do not exist in the Foreman quarry. Therefore, selective quarrying is not considered technically feasible for this particular plant.

Thermal Oxidation

For the purpose of this BACT evaluation, the RTO system is considered technically feasible for reducing VOC emissions. However, the overall environmental benefit, taking into account economic, environmental, energy, and other factors, of implementing such a system on this process is not justifiable under the BACT guidelines.

Catalytic Oxidation

Due to the expected limited life of the catalyst and the resulting operational unreliability, as well as the catalyst disposal concern, the use of catalytic oxidation is considered an infeasible control option and does not merit further consideration in the BACT analysis.

The RTO and GCP were the only technically feasible options out of all control methods considered. However, an RTO has a control cost of $162,345 per ton VOC removed and is considered economically infeasible.

AGC has selected the base-case use of GCP as BACT for VOC control for the Foreman pyroprocessing system. The use of GCP for the control of CO emissions will minimize combustion-related VOC emissions.

AGC proposes a BACT limit for VOCs of 27.5 pounds per hour (30-day rolling average) for the pyroprocessing system. This limit is comparable to BACT limits for similar facilities.

Ambient Air Quality Impact Analysis

The PSD regulations also require completion of an AAQIA for criteria pollutants that would be emitted in excess of their respective significant emission levels. The purpose of the AAQIA is to demonstrate that the proposed construction or modification will not cause or contribute to any violation of a NAAQS, or an exceedance of a PSD increment.

In accordance with EPA guidelines, the modeled concentrations of pollutants exceeding the PSD significant emission rates must be compared to the Modeling Significance Levels (MSLs). If a significant impact (i.e., an ambient impact above the MSL for a given pollutant and averaging period) is not observed, no further modeling analysis (i.e., NAAQS and Class II PSD Increment modeling) is required for that pollutant. If a significant impact is shown, NAAQS and PSD Increment modeling is required.

The emissions modeled in the significance analysis must reflect the results of the BACT analysis. Additionally, the modeled concentrations must be compared to the monitoring *de minimis* level to determine if pre-construction monitoring may be required for pollutants that trigger a PSD review. The MSLs and monitoring *de minimis* levels for PSD-regulated pollutants that will be emitted by the modernization of the Foreman plant are shown in the following table.

Modeling Significance and Monitoring *De Minimis* Levels

Pollutant	Averaging Period	MSL (µg/m3)	Monitoring *De Minimis* Level (µg/m3)
NO_2	Annual	1	14
CO	8-hour	500	575
	1-hour	2,000	--

SO_2	Annual	1	--
	24-hour	5	13
	3-hour	25	--
PM_{10}	Annual	1	---
	24-hour	5	10
Ozone	8-hour	---	100 tpy VOC

To be subject to MSL modeling for a pollutant, the net emissions increase of that pollutant must exceed the PSD significant emission rate. Based on the net emissions increase calculations, CO is the only pollutant subject to MSL modeling requirements.

The emission rates modeled in the CO analysis were the maximum potential emission rates for the proposed Foreman sources with respect to the pollutant specific averaging periods (i.e., short-term emission rates were used for 8-hour and 1-hour averaging periods).

Since the highest 1st-high concentrations for the 1-hour and 8-hour averaging periods do not exceed their respective MSLs or monitoring *de minimis* levels, further NAAQS and Class II PSD Increment modeling is not required.

The results of the modeling analysis demonstrate compliance with the corresponding NAAQS. The following table compares the maximum pollutant concentrations to each appropriate NAAQS averaging period.

Summary of NAAQS Analysis

Pollutant	Averaging Period	Standard ($\mu g/m^3$)	Modeled Concentration* ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Maximum Plus Background ($\mu g/m^3$)	Percent of Standard
CO	1-hour	40,000	101	3,262	3,363	8 %
	8-hour	10,000	70	2,097	2,167	22 %
NO_2	Annual	100	1.2	8	9.2	9 %
PM_{10} (Scenario1)	24-hour	150	109.9	35	144.9	97%
	Annual	50	21	19	40	80%
PM10 (Scenario 2)	24-hour	150	110	35	145	97%
	Annual	50	21	19	40	80%
SO_2	3-hour	1,300	21	47	68	5 %
	24-hour	365	7.6	13	21	6 %
	Annual	80	1.1	8	9.1	11 %

*The high-2nd-high concentration is provided for all short term (i.e., 1, 3, 8, and 24-hour) averaging periods.

As evident in the above table, modeled emissions from AGC are found to produce impacts that are below all applicable NAAQS.

Additional Impacts Analyses

Soils, Vegetation, and Animals

The analysis of soils, vegetation, and animals is based on the methodology outlined in the USEPA document, *A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals* (guidance document).

The guidance document outlines an approach to determine possible adverse affects on soils, vegetation, and animals from pollutants. The first is for vegetation exposure to airborne pollutants. A plant's susceptibility to adverse affects from airborne pollutants is classified as sensitive, intermediate, or resistant. The minimum impact required to damage a plant is called the threshold value. Impacts above the threshold values can cause visible injuries such as premature senescence, chlorosis, necrosis, or abscission of leaves. Threshold values for each category are provided in the above referenced guidance document. Airborne pollutant exposure is evaluated by comparing the maximum predicted ambient impact to the threshold value for each classification. The maximum predicted impact for a pollutant is the sum of the peak impact found through dispersion modeling and the known background concentration for the pollutant.

To obtain appropriate background concentrations for the Foreman area, a search of air quality monitors in the four state region surrounding Foreman (Oklahoma, Texas, Arkansas, and Louisiana) was performed. For each pollutant, an appropriate background was selected based on available monitors in relation to the plant. In cases where the background concentration was not provided for the averaging period of interest, the available concentration was scaled according to the factors listed in the USEPA document, *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources*. The factors for converting a 1-hour average concentration to other averaging periods are shown in the following table.

Averaging Time Conversion Factors

Averaging Time	Multiplying Factor
1 hour	1.00
3 hours	0.83
8 hours	0.70
24 hours	0.58
4 days	0.46
10 days	0.39
Annual	0.08

Wherever a factor was not available for a specific averaging time, the next shorter averaging time was substituted as a conservative alternative. All background values and conversion factors used are presented in the following table.

Background Pollutant Concentrations

Pollutant	Given Background Concentration (µg/m^3)	Averaging Period	Conversion Calculation	Averaging Period Used for Calculated Background	Converted Background Concentration (µg/m^3)	Averaging Period
SO_2[a]	84	1-hour			84	1-hour
	47	3-hour			47	3-hour
	8	Annual			8	Annual
NO_x[a]	46	1-hour	0.83	3-hour	38	4-hour
	46	1-hour	0.70	8-hour	32	8-hour
	46	1-hour	0.39	10-days	18	1-month
	8	Annual			8	Annual
CO[a]	3,262	1-hour	0.46	4-days	1,501	1-week

Background concentrations were added to the maximum impacts modeled from the Foreman plant and compared to the screening values found in the guidance document. The results are presented in below.

Comparison Of Maximum Predicted Impacts To Screening Values

Pollutant	Averaging Time	Modeled Concentration (µg/m^3)	Background Concentration (µg/m^3)	Total Predicted Concentration (µg/m^3)	Screening Value[b] (µg/m^3)	Screening Value Exceeded?
SO_2	1-hour	37	84	121	917	No
	3-hour	22	47	69	786	No
	Annual	1.1	8	9.1	18	No
NO_x	4-hour	24	38	62	3,760	No
	8-hour	19	32	51	3,760	No
	Month	3.0	18	21	564	No
	Annual	1.2	8	9.2	94	No
CO	1-week	46[a]	1,501	1,547	1,800,000	No

a. Scaled from a 1-hour high of 101 µg/m^3
b. Per guidance document

As shown above, the maximum impacts of SO_2, NO_x, and CO are below the threshold values. Therefore, no adverse impacts to vegetation are expected from exposure to airborne pollutants. It should also be noted that the secondary NAAQS were promulgated, in part, to protect plants

and animals in the environment. The Foreman plant has demonstrated compliance with the primary and secondary NAAQS standards.

Growth

The construction activities may require a temporary increase in the size of the labor force working and living in the surrounding region. However, few of these additional workers are expected to permanently relocate to the vicinity. As a result, a permanent increase in pollutant emissions or ambient concentrations indirectly associated with the proposed construction activity is not expected.

The modernized plant is not expected to employ additional people for the long-term operations. Therefore, significant increases in pollutant emissions or ambient concentrations are not expected to result from the indirect activity of an increase in population.

Visibility/Class I Analysis

The Clean Air Act Amendments of 1977 included provisions for the protection of visibility in designated Class I areas. These requirements are detailed in USEPA's PSD program in 40 CFR Parts 51 and 52. Federal Land Managers (FLM) have the responsibility of evaluating the effects of air pollution in such designated areas. This includes evaluating potential impacts due to visibility degradation, ambient pollutant concentrations, and increment consumption. The FLM typically follow the recommendations of the "Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long Range Transport Impacts" (EPA 454/R-98-019) and the "Federal Land Managers' Air Quality Related Values Workgroup (FLAG) Phase 1 Report" (December 2000) for air quality dispersion modeling analyses.

One Class I area, Caney Creek Wilderness Area, is located within 100 kilometers of the Foreman plant. Caney, established in 1968, consists of 14,460 acres in Polk County, Arkansas. It was created to enhance management of all wildlife species in west central Arkansas.

In accordance with federal guidelines, a regional visibility analysis would typically be required for the Foreman plant modernization project. However, the plant modernization project will not result in significant net emissions increases in pollutants associated with Class I area visibility impairment (i.e., PM_{10}, SO_2, and NO_x). The modernization project will result in a decrease of these pollutants. An increase in the emissions of CO will result from the plant modernization. However, CO is not a visibility pollutant. Therefore, a visibility analysis for the Caney Class I area is not required. Due to the expected decreases in PM_{10}, NO_x and SO_2, visibility improvements may result from the project.

Regional Haze Impacts

The new preheater/precalciner cement kiln system will replace the existing kilns at AGC's Foreman cement plant during this plant modernization project. The new kiln is expected to start

up in the first quarter of 2009. Due to power limitations at Foreman, the existing and new kilns cannot operate concurrently. Therefore, once the final shakedown of the new kiln is completed, the existing kilns will be removed. It is anticipated that the existing kilns will be out of service prior to the implementation date of any BART requirements.

Nonattainment Area New Source Review

Proposed new and modified major sources located in federally designated nonattainment areas are subject to the provisions in Part D of the CAA. The Foreman plant, however, is located in an attainment area for all criteria pollutants. Therefore, the proposed plant is not subject to the requirements of nonattainment area NSR.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective May 28, 2006
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Part 52.21, Regulations for the Prevention of Significant Deterioration of Air Quality
40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels(Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification commenced After July 23, 1984*
40 CFR Part 60, Subpart IIII, *New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines*
40 CFR Part 61, Subpart FF, *National Emission Standards for Benzene Waste Operations*
40 CFR Part 63, Subpart DD, *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*
40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*
40 CFR Part 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors*

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary (Pyroprocessing Scenario)

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	93.0	257.6
		PM_{10}	93.0	257.6
		SO_2	618.3	2699.7
		VOC	40.9	138.5
		CO	2506.3	1727.3
		NO_X	688.6	2975.5
		1,1,1-Trichloroethane* 1,1,2,2-Tetrachloroethane* 1,1,2-Trichloroethane* 1,1-Dichloroethane* 1,1-Dimethyl hydrazine* 1,2-Dibromo-3-chloropropane* 1,2-Dichloroethane* 1,2-Dichloropropane* 1,2-Diphenylhydrazine* 1,2-Epoxybutane* 1,2-Propylenimine (2-Methylaziridine)* 1,3-Butadiene* 1,3-Propane sultone* 1,4-Dioxane* 1,4-Phenylenediamine* 2,2,4-Trimethylpentane* 2,3,7,8-Tetrachlorodibenzo-p-dioxin* 2,4-D, salts and esters* 2,4-Toluene diamine* 2,4-Toluene diisocyanate* 2-Acetylaminofluorene* 2-Chloroacetophenone* 2-Nitropropane* 3,3-Dimethoxybenzidine* 3,3'-Dimethyl benzidine*	27.5	120.5

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		4,4-Methylenebis(2-chloroaniline)*		
		4,4'-Methylenedianiline*		
		4,6-Dinitro-o-cresol, and salts*		
		4-Nitrobiphenyl*		
		Acetaldehyde*		
		Acetamide*		
		Acetonitrile*		
		Acetophenone*		
		Acrolein*		
		Acrylic acid*		
		Benzene*		
		Benzotrichloride*		
		Benzyl chloride*		
		beta-Propiolactone*		
		Biphenyl*		
		Bromoform*		
		Calcium cyanamide*		
		Captan*		
		Carbaryl*		
		Carbonyl sulfide*		
		Catechol*		
		Chloramben*		
		Chlordane*		
		Chloroacetic acid*		
		Chlorobenzilate*		
		Chloromethyl methyl ether*		
		Chloroprene*		
		Cresols/Cresylic acid*		
		DDE*		
		Diazomethane*		
		Dibutylphthalate*		
		Dichlorvos*		
		Diethanolamine*		
		Diethyl sulfate*		
		Dimethyl aminoazobenzene*		
		Dimethyl carbamoyl chloride*		
		Dimethyl formamide*		

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Dimethyl sulfate* Epichlorohydrin (l-Chloro-2,3epoxypropane)* Ethyl carbamate (Urethane)* Ethyl chloride (Chloroethane)* Ethylene dibromide* Ethylene glycol* Ethylene imine (Aziridine)* Ethylene oxide* Ethylene thiourea* Ethylidene dichloride* Formaldehyde* Glycol ethers* Heptachlor* Hexamethylene-1,6-diisocyanate* Hexamethylphosphoramide* Hydrazine* Lindane (all isomers)* Maleic anhydride* m-Cresol* Methanol* Methoxychlor* Methyl hydrazine* Methyl isobutyl ketone (Hexone)* Methyl isocyanate* Methyl Methacrylate* Methyl tert-butyl ether* Methylene diphenyl diisocyanate* N,N-Dimethylaniline* N-Nitrosodimethylamine* N-Nitrosomorpholine* N-Nitroso-N-methylurea* o-Anisidine* o-Cresol* Parathion* p-Cresol*		

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Phosgene* Phosphine* Phthalic anhydride* Polychlorinated biphenyls* Propionaldehyde* Propoxur (Baygon)* Propylene oxide* Quinoline* Quinone* Styrene oxide* Tetrachloroethylene* Toxaphene (chlorinated camphene)* trans-1,3-Dichloropropene* Trichloroethylene* Triethylamine* Trifluralin* Vinyl acetate* Vinyl chloride*		
		Dioxin/Furan	2.93E-7	1.3E-6
		HCl Hydrogen fluoride Hydrogen sulfide Chlorine Titanium tetrachloride Carbon tetrachloride	95.1	416.6
		Arsenic	0.04	0.2
		Beryllium	0.04	0.2
		Cadmium	0.14	0.7
		Chromium	0.04	0.2
		Lead	0.14	0.7
		Mercury	0.09	0.4
		Antimony** Asbestos** Cobalt** Cyanide Compounds** Fine mineral fibers** Manganese** Nickel**	31.0	119.3

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Phosphorus** Polycylic Organic Matter** Radionuclides** (including radon) Selenium**		
		Hexachlorobenzene	1.7	5.0
		Acrylamide	25.0	5.0
		Bis(chloromethyl)ether	4.0	5.0
111.R1A-F	Quarry Haul Road	PM PM_{10}	6.9 6.9	6.9 6.9
111.T10	Transfer, Truck Unloading into 111.HP1	PM PM_{10}	1.9 1.9	0.8 0.8
111.T12	Transfer, Truck Unloading into 111.HP2	PM PM_{10}	1.9 1.9	0.8 0.8
211.BF1	Dust Collector, Primary Crusher	PM PM_{10}	0.5 0.5	1.9 1.9
211.CR2	Crusher, Brick	PM PM_{10}	0.1 0.1	0.1 0.1
211.CH8	Transfer, 211.BC10 to 211.BC1	PM PM_{10}	0.1 0.1	0.1 0.1
211.T10	Transfer, Loader unloading into 211.HP1	PM PM_{10}	0.1 0.1	0.1 0.1
211.ED10	Brick Crusher Diesel Engine	PM PM_{10} SO_2 VOC CO NO_x	0.2 0.2 0.2 0.2 0.6 2.5	0.1 0.1 0.1 0.1 0.3 1.3
213.BF10	Dust Collector, Sand and Iron Unloading	PM PM_{10}	0.3 0.3	1.0 1.0
213.BF20	Dust Collector, Sand and Iron Transport	PM PM_{10}	0.5 0.5	1.9 1.9
213.BF30	Dust Collector, Iron Spout Discharge	PM PM_{10}	0.1 0.1	0.4 0.4
213.BF40	Dust Collector, Sand Spout Discharge	PM PM_{10}	0.1 0.1	0.4 0.4
213.T1	Transfer, Truck Unloading to 213.HP010	PM PM_{10}	0.5 0.5	0.2 0.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
221.BF10	Dust Collector, Stacker Transfer	PM PM_{10}	0.4 0.4	1.8 1.8
221.CH01	Chute, 221.BC10 to 221.ST10	PM PM_{10}	1.9 1.9	1.6 1.6
221.RMB1	Raw Material Building for Sand, Iron and Limestone	PM PM_{10}	0.1 0.1	0.2 0.2
221.T1	Transfer, Stacker Conveyor to Limestone Pile	PM PM_{10}	1.9 1.9	1.6 1.6
311.BF1	Dust Collector, Secondary Crusher	PM PM_{10}	0.2 0.2	0.8 0.8
311.CH1	Chute, Secondary Crusher Discharge	PM PM_{10}	0.1 0.1	0.1 0.1
311.CH10	Chute, Limestone Hopper to 311.AF6	PM PM_{10}	0.1 0.1	0.1 0.1
311.CH11	Chute, 311.AF6 to 311.BC1	PM PM_{10}	0.1 0.1	0.1 0.1
311.CH15	Chute, Gypsum Hopper to 311.AF5	PM PM_{10}	0.1 0.1	0.1 0.1
311.CH16	Chute, 311.AF5 to 311.BC1	PM PM_{10}	0.1 0.1	0.1 0.1
311.CHC	Chute, Discharge into Secondary Crusher	PM PM_{10}	0.1 0.1	0.1 0.1
321.CH01	Chute, 321.RE10 to 321.BC10	PM PM_{10}	1.9 1.9	1.6 1.6
323.BF10	Dust Collector, Sand and Iron to Bins	PM PM_{10}	0.3 0.3	1.0 1.0
323.T1	Chute, Iron/Sand Reclaim to 323.AF10	PM PM_{10}	0.3 0.3	1.1 1.1
325.BF10	Dust Collector, Limestone Bin 325.BN01	PM PM_{10}	0.4 0.4	1.4 1.4
325.BF20	Dust Collector, Raw Material Bins 325.BN04	PM PM_{10}	0.3 0.3	1.0 1.0
325.BF30	Dust Collector, Raw Material Discharge	PM PM_{10}	0.5 0.5	2.1 2.1
326.BF10	Dust Collector, Raw Mill Feed System	PM PM_{10}	0.4 0.4	1.6 1.6
326.BF20	Dust Collector, Reject	PM	0.1	0.3

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Loading Spout 326.LS10	PM_{10}	0.1	0.3
326.BF30	Dust Collector, Raw Mill Rejects	PM PM_{10}	0.4 0.4	1.4 1.4
327.BF10	Dust Collector, Raw Material Airslide 327.AS03	PM PM_{10}	0.2 0.2	0.8 0.8
327.BF20	Dust Collector, Raw Material Airslide 327.AS04	PM PM_{10}	0.2 0.2	0.6 0.6
327.BF30	Dust Collector, Raw Material Airslide 327.AS05	PM PM_{10}	0.2 0.2	0.9 0.9
329.BF10	Dust Collector, High Grade Limestone Bin 329.BI01	PM PM_{10}	0.2 0.2	0.7 0.7
329.BF20	Dust Collector, Alleviator 329.AV01 Deaeration	PM PM_{10}	0.1 0.1	0.4 0.4
403.BF3	Dust Collector, 500 Ton Silos	PM PM_{10}	0.3 0.3	1.3 1.3
403.BF4	Dust Collector, 1500 Ton Silo	PM PM_{10}	0.5 0.5	1.9 1.9
403.BF6	Dust Collector, 1500 Ton Silo	PM PM_{10}	0.4 0.4	1.6 1.6
403.BF7	Dust Collector, CKD Truck Loadout DC-61	PM PM_{10}	0.2 0.2	0.7 0.7
403.BF8	Dust Collector, 500 Ton Silos	PM PM_{10}	0.3 0.3	1.3 1.3
403.CHM	Chute, Truck Loading of CKD	PM PM_{10}	0.1 0.1	0.1 0.1
403.CHR	Chute, CKD Truck Loadout	PM PM_{10}	0.1 0.1	0.1 0.1
403.CHU	Chute, Truck Loading of CKD	PM PM_{10}	0.1 0.1	0.1 0.1
403.P1	Pile, CKD	PM PM_{10}	1.4 1.4	5.8 5.8
403.T1	Transfer, Truck Unloading of CKD	PM PM_{10}	0.1 0.1	0.1 0.1
403.T2	Transfer, Trailer Unloading of CKD	PM PM_{10}	0.1 0.1	0.1 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
40F.TX1	Thermal Oxidizer, LWDF Tanks	PM PM_{10} VOC CO NO_x	0.1 0.1 1.0 0.6 0.1	0.1 0.1 4.4 2.5 0.5
41A.BF10	Dust Collector, Coal/Coke/Gypsum Unloading	PM PM_{10}	0.3 0.3	1.0 1.0
41A.BF20	Dust Collector, Cola/Coke/Gypsum Storage Discharge	PM PM_{10}	0.3 0.3	1.2 1.2
41A.P1	A-frame Coal/Coke Pile	PM PM_{10}	0.1 0.1	0.1 0.1
41A.P2	A-frame Gypsum Pile	PM PM_{10}	0.1 0.1	0.1 0.1
41A.P3	A-frame Limestone Pile	PM PM_{10}	0.1 0.1	0.1 0.1
41A.P5	Outside Coal/Coke Pile	PM PM_{10}	0.1 0.1	0.3 0.3
41A.P6	Outside Gypsum Pile	PM PM_{10}	0.1 0.1	0.1 0.1
41A.P7	Outside Limestone Pile	PM PM_{10}	0.1 0.1	0.1 0.1
41A.T1	Transfer, 41A.BC20 to Gypsum Pile in Chalk Shed	PM PM_{10}	0.4 0.4	0.1 0.1
41A.T2	Transfer, 41A.BC20 to Coal/Coke Pile in Chalk Shed	PM PM_{10}	0.4 0.4	0.1 0.1
41A.T10	Transfer, Rail and Truck Unloading into 41A.HP10	PM PM_{10}	0.4 0.4	0.1 0.1
41F.BF10	Dust Collector, BWDF Bin	Vents to either 443.SK10 or 41F.TX10		
41F.TX10	Thermal Oxidizer, BWDF Kiln Fuels	PM PM_{10} SO_2 VOC CO	0.1 0.1 0.1 0.4 2.3	0.2 0.2 0.1 1.7 9.8

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		NO_x	0.5	1.8
441.BF10	Dust Collector, Blending Silo 441.SI10 Vent	PM PM_{10}	0.4 0.4	0.6 0.6
442.BF10	Dust Collector, Kiln Feed Airslide 442.AS10	PM PM_{10}	0.2 0.2	0.6 0.6
442.BF20	Dust Collector, Kiln Feed System	PM PM_{10}	0.2 0.2	0.9 0.9
443.BF20	Dust Collector, Cement Kiln Dust Bin, 443.BI10	PM PM_{10}	0.2	0.6
443.BF10	Dust Collector, Raw Mill, Preheater and Kiln	PM PM_{10} SO_2 VOC CO NO_x	31.0 31.0 616.0[1] 27.5[1] 2,500.0[2] 678.0[1]	119.3 119.3 2,699.0 120.5 1,714.0 2,970.0
443.BF30	Baghouse, Kiln Bypass			
44B.BF20	Dust Collector, Coal Mill			
443.SK10	Stack, Raw Mill, Kiln, Coal Mill and Bypass Gas Exhaust	1,1,1-Trichloroethane* 1,1,2,2-Tetrachloroethane* 1,1,2-Trichloroethane* 1,1-Dichloroethane* 1,1-Dimethyl hydrazine* 1,2-Dibromo-3-chloropropane* 1,2-Dichloroethane* 1,2-Dichloropropane* 1,2-Diphenylhydrazine* 1,2-Epoxybutane* 1,2-Propylenimine (2-Methylaziridine)* 1,3-Butadiene* 1,3-Propane sultone* 1,4-Dioxane* 1,4-Phenylenediamine* 2,2,4-Trimethylpentane* 2,3,7,8-Tetrachlorodibenzo-p-dioxin* 2,4-D, salts and esters* 2,4-Toluene diamine* 2,4-Toluene diisocyanate* 2-Acetylaminofluorene*	27.5	120.5

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		2-Chloroacetophenone*		
		2-Nitropropane *		
		3,3-Dimethoxybenzidine*		
		3,3'-Dimethyl benzidine*		
		4,4-Methylenebis(2-chloroaniline)*		
		4,4'-Methylenedianiline*		
		4,6-Dinitro-o-cresol, and salts*		
		4-Nitrobiphenyl*		
		Acetaldehyde*		
		Acetamide*		
		Acetonitrile*		
		Acetophenone*		
		Acrolein*		
		Acrylic acid*		
		Benzene*		
		Benzotrichloride*		
		Benzyl chloride*		
		beta-Propiolactone*		
		Biphenyl*		
		Bromoform*		
		Calcium cyanamide*		
		Captan*		
		Carbaryl*		
		Carbonyl sulfide*		
		Catechol*		
		Chloramben*		
		Chlordane*		
		Chloroacetic acid*		
		Chlorobenzilate*		
		Chloromethyl methyl ether*		
		Chloroprene*		
		Cresols/Cresylic acid*		
		DDE*		
		Diazomethane*		
		Dibutylphthalate*		
		Dichlorvos*		
		Diethanolamine*		
		Diethyl sulfate*		
		Dimethyl aminoazobenzene*		

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Dimethyl carbamoyl chloride* Dimethyl formamide* Dimethyl sulfate* Epichlorohydrin (l-Chloro-2,3epoxypropane)* Ethyl carbamate (Urethane)* Ethyl chloride (Chloroethane)* Ethylene dibromide* Ethylene glycol* Ethylene imine (Aziridine)* Ethylene oxide* Ethylene thiourea* Ethylidene dichloride* Formaldehyde* Glycol ethers* Heptachlor* Hexamethylene-1,6-diisocyanate* Hexamethylphosphoramide* Hydrazine* Lindane (all isomers)* Maleic anhydride* m-Cresol* Methanol* Methoxychlor* Methyl hydrazine* Methyl isobutyl ketone (Hexone)* Methyl isocyanate* Methyl Methacrylate* Methyl tert-butyl ether* Methylene diphenyl diisocyanate* N,N-Dimethylaniline* N-Nitrosodimethylamine* N-Nitrosomorpholine* N-Nitroso-N-methylurea* o-Anisidine* o-Cresol* Parathion*		

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		p-Cresol* Phosgene* Phosphine* Phthalic anhydride* Polychlorinated biphenyls* Propionaldehyde* Propoxur (Baygon)* Propylene oxide* Quinoline* Quinone* Styrene oxide* Tetrachloroethylene* Toxaphene (chlorinated camphene)* trans-1,3-Dichloropropene* Trichloroethylene* Triethylamine* Trifluralin* Vinyl acetate* Vinyl chloride*		
		Dioxin/Furan	2.93E-7	1.3E-6
		HCl Hydrogen fluoride Hydrogen sulfide Chlorine Titanium tetrachloride Carbon tetrachloride	95.1	416.6
		Arsenic Beryllium Cadmium Chromium Lead Mercury	0.04 0.04 0.14 0.04 0.14 0.09	0.2 0.2 0.7 0.2 0.7 0.4
		Antimony** Asbestos** Cobalt** Cyanide Compounds** Fine mineral fibers** Manganese**	31.0	119.3

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Nickel** Phosphorus** Polycylic Organic Matter** Radionuclides** (including radon) Selenium**		
		Hexachlorobenzene	1.7	5.0
		Acrylamide	25.0	5.0
		Bis(chloromethyl)ether	4.0	5.0
449.BF10	Dust Collector, Clinker Cooler Discharge	PM PM_{10}	0.1 0.1	0.4 0.4
449.BF20	Dust Collector, Clinker Bin Vents	PM PM_{10}	0.2 0.2	0.6 0.6
449.BF30	Dust Collector, Clinker Reclaim Elevator	PM PM_{10}	0.4 0.4	1.5 1.5
449.BF40	Dust Collector, Clinker Dome Vent	PM PM_{10}	0.5 0.5	2.1 2.1
449.BF46	Dust Collector, Clinker Reclaim Conveyor 449.BC05 Discharge	PM PM_{10}	0.2 0.2	0.6 0.6
449.BF50	Dust Collector, Clinker Reclaim Conveyor Transfer	PM PM_{10}	0.2 0.2	0.9 0.9
449.HP2	Hopper, Outside Clinker Reclaim	PM PM_{10}	0.2 0.2	0.1 0.1
449.P1	Pile, Outside Clinker Storage	PM PM_{10}	0.1 0.1	0.2 0.2
449.T1	Transfer, Outside Clinker Belt Discharge	PM PM_{10}	0.5 0.5	1.9 1.9
449.T2	Transfer, Clinker Railcar and Truck Hopper Unloading	PM PM_{10}	1.0 1.0	0.5 0.5
449.T3	Transfer, Clinker Discharge to Railcar/Truck	PM PM_{10}	1.0 1.0	0.5 0.5
449.T4	Transfer, Loader to 449.HP2	PM PM_{10}	0.2 0.2	0.1 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
44A.BF10	Dust Collector, Apron Feeder 44A.AF10	PM PM_{10}	0.3 0.3	1.0 1.0
44A.T10	Transfer, Loader Unloading into 44A.HP10	PM PM_{10}	0.2 0.2	0.1 0.1
44B.BF10	Dust Collector, Coal Coke Bin Vent	PM PM_{10}	0.1 0.1	0.5 0.5
44B.BF30	Dust Collector, Pulverized Fuel Bin 44C.BI10 Vent	PM PM_{10}	0.1 0.1	0.1 0.1
502.BF1	Dust Collector, Gypsum/Clinker Railcar Loadout	PM PM_{10}	0.2 0.2	0.8 0.8
502.BF2	Dust Collector, Clinker Receiving DC-54	PM PM_{10}	0.2 0.2	0.8 0.8
502.CH3	Chute, Discharge of Gypsum Belt	PM PM_{10}	0.3 0.3	0.3 0.3
502.T1	Transfer, Gypsum Truck/Rail Discharge into Hopper	PM PM_{10}	0.1 0.1	0.1 0.1
502.T2	Transfer, Clinker Truck Discharge into Hopper	PM PM_{10}	0.6 0.6	0.2 0.2
511.BF1	Dust Collector, Outside Clinker Bins Discharge	PM PM_{10}	0.2 0.2	0.8 0.8
533.LS10	Transfer from 511.BI100 to Truck	PM PM_{10}	0.8 0.8	0.4 0.4
514.BF1	Dust Collector on Bin #44	PM PM_{10}	0.3 0.3	1.0 1.0
514.BF2	Dust Collector, #2 Finish Mill	PM PM_{10}	0.7 0.7	3.0 3.0
514.BF3	Dust Collector, #2 Finish Mill Discharge	PM PM_{10} VOC Ethylene Glycol* Diethanolamine*	0.5 0.5 1.3 0.1 0.1	2.0 2.0 1.3 0.1 0.1
514.BF5	Dust Collector, B Belt	PM PM_{10}	0.1 0.1	0.1 0.1
521.BF1	Dust Collector, West Clinker Silo	PM PM_{10}	0.6 0.6	2.6 2.6

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
521.BF2	Dust Collector, East Clinker Silo	PM PM_{10}	0.6 0.6	2.6 2.6
523.BF2	Dust Collector, Clinker Receiving	PM PM_{10}	0.7 0.7	3.0 3.0
524.BF1	Dust Collector, #4 Finish Mill Discharge	PM PM_{10} VOC Ethylene Glycol* Diethanolamine*	1.0 1.0 4.2 0.1 0.1	4.2 4.2 4.2 0.1 0.1
524.BF2	Dust Collector, #4 Finish Mill	PM PM_{10}	1.5 1.5	6.6 6.6
531.BF10	Dust Collector, 531BC.10 Discharge	PM PM_{10}	0.3 0.3	1.0 1.0
531.BF20	Dust Collector, Limestone, Gypsum Bins Vent	PM PM_{10}	0.3 0.3	1.0 1.0
533.BF10	Dust Collector, Finish Mill Feed Bins Discharge	PM PM_{10}	0.2 0.2	0.9 0.9
534.BF10	Dust Collector, Finish Mill Feed System	PM PM_{10}	0.3 0.3	1.2 1.2
534.BF20	Dust Collector, Finish Mill Recirculation System	PM PM_{10}	0.3 0.3	1.0 1.0
535.BF10	Dust Collector, Finish Mill 534.RM10 Discharge	PM PM_{10} VOC Ethylene Glycol* Diethanolamine*	2.0 2.0 5.2 0.1 0.1	5.1 5.1 5.2 0.1 0.1
535.BF20	Dust Collector, Pneumatic Conveying System to Storage	PM PM_{10}	0.1 0.1	0.5 0.5
611.BF1	Dust Collector, Rail DC#24	PM PM_{10}	0.6 0.6	2.4 2.4
611.BF10	Dust Collector, Silos 19 and 20 Discharge to Elevator	PM PM_{10}	0.1 0.1	0.5 0.5
611.BF2	Dust Collector, Rail Silo #25	PM PM_{10}	0.4 0.4	1.9 1.9
611.BF20	Dust Collector, Elevator	PM	0.1	0.3

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Discharge	PM_{10}	0.1	0.3
611.BF30	Dust Collector, Rail Loadout Bin Vent	PM PM_{10}	0.2 0.2	0.6 0.6
611.BF40	Dust Collector, Outside Cement Loading to Rail	PM PM_{10}	0.1 0.1	0.3 0.3
612.BF1	Dust Collector, Kaiser Silos DC #21	PM PM_{10}	0.5 0.5	2.1 2.1
612.BF2	Dust Collector	PM PM_{10}	0.2 0.2	0.8 0.8
612.BF3	Dust Collector, Kaiser Silos DC #22	PM PM_{10}	0.2 0.2	0.7 0.7
612.BF4	Dust Collector, Kaiser Silo DC #30	PM PM_{10}	0.2 0.2	0.7 0.7
612.BF5	Dust Collector, Geocem DC #26	PM PM_{10}	0.7 0.7	3.0 3.0
612.BF6	Dust Collector, Masonry Rail Loadout	PM PM_{10}	0.6 0.6	2.4 2.4
621.BF1	Dust Collector, Delta Silo DC #23	PM PM_{10}	0.6 0.6	2.5 2.5
621.BF2	Dust Collector, Truck Loadout DC #28	PM PM_{10}	0.5 0.5	1.9 1.9
621.BF3	Dust Collector, Truck Loadout DC #31/32	PM PM_{10}	0.2 0.2	0.8 0.8
621.BF5	Dust Collector, Truck Loadout DC #49	PM PM_{10}	0.7 0.7	3.0 3.0
ADDS	Additive Deliveries	PM PM_{10}	0.1 0.1	0.1 0.1
BWDF	BWDF Deliveries to Preheater Area	PM PM_{10}	0.1 0.1	0.2 0.2
CACL	CaCl Deliveries to Preheater Area	PM PM_{10}	0.1 0.1	0.1 0.1
CACLALT	CaCl Deliveries to Preheater Area Alternate Route	PM PM_{10}	0.1 0.1	0.1 0.1
CEM	Current Cement Loadout Road	PM PM_{10}	0.2 0.2	0.2 0.2
CEM20	Current Cement Loadout Road Truck/Rail Loadout	PM PM_{10}	0.1 0.1	0.1 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
CEM80	Current Cement Loadout	PM	0.1	0.1
	Road Truck Loadout	PM_{10}	0.1	0.1
CKD	CKD from Pug Mill to	PM	0.1	0.1
	Landfill	PM_{10}	0.1	0.1
CKDS	CKD from Pug Mill to	PM	0.2	0.1
	Highway	PM_{10}	0.2	0.1
CLKD	Clinker Delivery to	PM	0.2	0.1
	Railcar Unloading	PM_{10}	0.2	0.1
CLKR	Clinker from Railcar	PM	0.3	0.1
	Unloading to Dome	PM_{10}	0.3	0.1
Coal	Coal Delivery by Truck	PM	0.1	0.1
		PM_{10}	0.1	0.1
Coal2WY	Coal Delivery by Truck	PM	0.4	0.4
	2-way Traffic	PM_{10}	0.4	0.4
Coal2WYALT	Coal Delivery by Truck	PM	0.4	0.5
	2-way Traffic	PM_{10}	0.4	0.5
CoalALT	Coal Delivery by Truck	PM	0.1	0.1
		PM_{10}	0.1	0.1
DRYLIME	Dry Lime Delivery to	PM	0.1	0.1
	Preheater Area	PM_{10}	0.1	0.1
DRYLIMEALT	Dry Lime Delivery to Preheater Area Alternate Route	PM	0.1	0.1
		PM_{10}	0.1	0.1
GYP	Gypsum Delivery by	PM	0.2	0.1
	Truck	PM_{10}	0.2	0.1
GYP2WY	Gypsum Delivery by	PM	0.7	0.3
	Truck 2-way Traffic	PM_{10}	0.7	0.3
GYPALT	Gypsum Delivery by	PM	0.2	0.1
	Truck	PM_{10}	0.2	0.1
GP2WYALT	Gypsum Delivery by	PM	0.8	0.4
	Truck 2-way Traffic	PM_{10}	0.8	0.4
NCEM	2007 Cement Loadout	PM	0.7	2.1
	Road	PM_{10}	0.7	2.1
RM	Raw Materials to	PM	0.2	0.2
	Building	PM_{10}	0.2	0.2
RM2WY	Raw Materials to	PM	0.5	0.3
	Building 2-way Traffic	PM_{10}	0.5	0.3
RMALT	Raw Materials to	PM	0.2	0.2
	Building Alternate Route	PM_{10}	0.2	0.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
RM2WYALT	Raw Materials to Building 2-way Traffic Alternate Route	PM PM_{10}	0.7 0.7	0.4 0.4
SLDWDTIRES	SWDF, LWDF and Tires Delivery	PM PM_{10}	0.3 0.3	1.1 1.1
41F.FT10	25,000 gal LWDF Tank	Vents to 40F.TX1		
41F.FT11	25,000 LWDF Tank	Vents to 40F.TX1		
RCC	Rail Car Cleaning	VOC	0.7	1.0
710.EG10	Emergency Generator	PM PM_{10} SO_2 VOC CO NO_x	0.4 0.4 2.0 0.4 2.8 7.5	0.1 0.1 0.5 0.1 0.7 1.9

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.
**HAPs included in the PM_{10} totals. Other HAPs are not included in any other total unless specifically stated.
1. 30-day rolling average value
2. 8-hour rolling average value

SECTION III: PERMIT HISTORY

Permit #75-A was issued to Arkansas Cement Corporation Foreman Production facilities on or about September 21, 1971. This permit allowed the installation of three "Precipitair" electrostatic precipitators and supporting equipment at the existing facility. Proposed emissions were 29.58 lb/hr of particulates.

Permit #75-A (modification) allowed the facility to use coal instead of natural gas as the primary fuel to fire the three cement kilns and to replace the three previously approved electrostatic precipitators. This amendment was issued on September 15, 1976.

Permit #75-A (modification) was issued on March 26, 1982. This modification allowed Arkansas Cement to install a gravel bed filter to control particulate discharge from the clinker coolers to replace the multiclone that was being used. Permitted emission rates dropped from 475 lb/hr to 25 lb/hr of particulate.

Permit #75-AR-3 was issued on May 27, 1983, and it rescinded the modification issued on March 26, 1982, because the facility decided to install a Fuller fabric filter with heat recovery instead of the gravel bed filter. This modification also included the replacement of part of the clinker handling system and the installation of a baghouse to control emissions generated at this crossover point. This modification added 1 lb/hr of particulate emissions.

Permit #75-AR-4 was issued on January 29, 1988. This modification changed the name of the facility to Ash Grove Cement Company and consolidated the existing emissions sources into one permit and placed restrictions on the use of waste-derived fuel at this facility. This permit allowed emissions of 99.9 lb/hr of TSP, 787 lb/hr of SO_2, 39 lb/hr of chlorine, 0.048 lb/hr of lead, and 0.006 lb/hr of chromium.

Permit #75-AR-5 was issued on June 30, 1989. This permit allowed Ash Grove to burn solid hazardous waste in the cement kilns. This permit allowed emissions of 92.2 lb/hr TSP, 1574 lb/hr of SO_2, 164.6 lb/hr of HCl, 0.22 lb/hr of lead, and 0.316 lb/hr of chromium.

Permit #75-AR-6 was issued on July 8, 1991. This permit allowed Ash Grove to change the outlet nozzles of the ESPs so that each kiln could vent to a single stack. Emissions were not increased due to this modification.

Permit #75-AR-7 was issued on November 13, 1991. This modification allowed all sources, regardless of size, to be permitted. No changes in operation were made. Emissions consisted of 553 tpy TSP, 6,894.1 tpy SO_2, 721 tpy HCl, 0.964 tpy lead, and 1.39 tpy chromium.

Permit #75-AR-8 was issued on June 15, 1994. This permit covered the installation of CEMS required by the BIF rule. Permit #75-AR-7 was modified so that the Air Permit monitoring requirements for SO_2, NO_x, and CO could be satisfied by the new CEMS. This modification also added two product storage silos and related materials handling equipment to improve the loading and shipping of finished product, and modified four existing dust control baghouses in a manner

that resulted in four new point discharge stacks. The carbon adsorption system on the liquid waste fuel storage tanks was replaced by a liquid nitrogen recovery condenser. These changes did not result in any changes to the emission rates at this facility.

Permit #75-AR-9 was issued on February 11, 1998. This modification authorized Ash Grove to burn waste tires as fuel. Emission rates for SO_2 were increased and emission rates for NO_x and CO were added. Emission totals listed in this permit were 567 tpy PM_{10}, 5,740 tpy SO_2, 1,183 tpy CO, 9,080 tpy NO_x, 0.964 tpy lead, and 3.0 tpy VOC.

Permit 1235-AR-1 was issued on November 7, 1995. This permit is for the limestone quarry located at the Ash Grove site. The requirements for this quarry are being incorporated into this permit. The quarry is permitted to emit 4.3 lb/hr and 19.0 tpy of PM/PM_{10}.

Permit 75-AOP-R0 was the initial Title V permit issued to Ash Grove Cement in Foreman, Arkansas on October 2, 2002. This permit allowed for several changes at this facility. The portable crusher (SN-R22) was permitted for the first time. Ash Grove installed 10 new LWDF tanks and changed the control device to a thermal oxidizer with a carbon adsorption backup system. A clinker storage dome was added to the facility and the ESPs used to control emissions from the kilns were refurbished. Also, the quarry (formerly permitted under permit #1235-AR-1) which supplies limestone for use in the cement kilns was included in this permit. The permit also incorporated the requirements of 40 CFR Part 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry, and 40 CFR Part 63, Subpart EEE, National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.

Permit 75-AOP-R1 was issued on May 30, 2003. This modification allowed Ash Grove to construct a new cement kiln dust (CKD) handling system (SN-P32, SN- P33, SN-P34, SN-P35 and SN-P36) and remove baghouses P18 and P19. This system allowed the CKD to be pneumatically conveyed across the highway to a new CKD landfill and it also allowed some of the CKD to be recycled to kiln #3. This modification resulted in net PM/PM_{10} emissions increases of 0.8 lb/hr and 2.6 tpy from the CKD handling equipment and 4 proposed new fabric filter dust collectors. Also, Ash Grove constructed a baghouse (SN-C44). This change resulted in an increase of PM/PM_{10} emissions of 0.17 lb/hr and 0.75 tpy. Finally, Ash Grove Cement Company added 3 drag conveyors and replaced 2 bucket conveyors and a belt conveyor that were part of the clinker handling system. The two bucket conveyors were the number 6 and number 7 bucket conveyors. The belt conveyor was the 440 belt. These conveyors are subject to all applicable sections of 40 CFR 63, Subpart LLL. No additional emissions are resulted from this modification.

Permit 75-AOP-R2 was issued on May 4, 2005. This modification combined and incorporated several requests for minor modifications to the Title V permit. This modification allowed for a redesign of the CKD handling system (SN-P32 through SN-P36) and the addition of P37. It was discovered that the system required additional conveying air. This modification also allowed Ash Grove to install a belt conveyor with integrated dust collector (SN-P38) to the CKD handling system.

Ash Grove has been given approval to manufacture a new product named DURACEM OW. Manufacture of this product will result in no increase in process emissions, however; there will be an increase in fugitive emissions from the haul roads (SN-R20). Finally, the facility replaced a bucket elevator in the Chalk Dryer System with a drag conveyor. No additional emissions occurred as a result of this change.

These changes resulted in net emissions increases of 1.5 tpy of PM and 3.1 tpy PM_{10} emissions from this facility.

Permit 75-AOP-R3 was issued on August 29, 2005. This modification allowed Ash Grove to install an additional baghouse for bins 26 and 27. The increased air flow resulting from installation of this new baghouse caused potential emissions increased by 4.5 tpy PM_{10}. This modification also corrected typographical errors found in 75-AOP-R2.

Permit 75-AOP-R4 was issued on January 12, 2006. Hydrogen chloride emissions were increased to match the emission rates allowed by 40 CFR 63, Subpart EEE. Other HAP emission rates were increased based on recent stack testing. Permitted increases were 597.7 tpy hydrogen chloride, 0.16 tpy acrylonitrile, 1.55 tpy benzene, 0.15 tpy bezidine, 0.11 tpy toluene, 0.16 tpy vinyl chloride. Ash Grove also changed the minimum kVa for each electrostatic precipitator based on data collected during the comprehensive performance test. The new minimum 3-hour rolling average kVa values are 198, 202, and 101 for kilns 1, 2, and 3 respectively.

Permit 75-AOP-R5 was issued on May 12, 2006. This modification allowed Ash Grove to install an additional baghouse (SN-P-39) on the 500 ton CKD Bin (SN-P35) and to replace a conveyor belt and add two baghouses (SN-C45 and C-46) to the clinker silos. These changes resulted in a permitted emissions increase of 2.4 tpy PM/PM_{10}.

Permit 75-AOP-R6 was issued on September 18, 2006. This modification allowed Ash Grove to replace an existing screw conveyor with a weigh belt (SN-M12) and add a conveyor belt to allow the addition of limestone to Mill No. 4 (SN-M46). This project resulted in additional permitted PM emissions of 0.5 tpy and PM_{10} emissions of 0.2 tpy.

SECTION IV: SPECIFIC CONDITIONS

Material Handling Transfer Point Emissions Subject to 40 CFR 63, Subpart LLL

Source Description

Raw materials, intermediate and final products and process wastes are moved about the facility using a combination of belt, chutes and pneumatic transfer.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
41A.T10	Transfer, Rail and Truck Unloading into 41A.HP10	PM_{10}	0.4	0.1
44A.T10	Transfer, Loader Unloading into 44A.HP10	PM_{10}	0.2	0.1
403.CHM	Chute, Truck Loading of CKD	PM_{10}	0.1	0.1
403.CHR	Chute, CKD Truck Loadout	PM_{10}	0.1	0.1
403.CHU	Chute, Truck Loading of CKD	PM_{10}	0.1	0.1
403.T1	Transfer, Truck Unloading of CKD	PM_{10}	0.1	0.1
403.T2	Transfer, Trailer Unloading of CKD	PM_{10}	0.1	0.1
449.HP2	Hopper, Outside Clinker Reclaim	PM_{10}	0.2	0.1
449.T1	Transfer, Outside Clinker Belt Discharge	PM_{10}	0.5	1.9
449.T2	Transfer, Clinker Railcar and Truck Hopper Unloading	PM_{10}	1.0	0.5
449.T3	Transfer, Clinker Discharge to Railcar/Truck	PM_{10}	1.0	0.5
449.T4	Transfer, Loader to 449.HP2	PM_{10}	0.2	0.1
533.LS10	Transfer from 511.BI100 to Truck	PM_{10}	0.8	0.4
502.CH3	Chute, Discharge of Gypsum Belt	PM_{10}	0.3	0.3

502.T1	Transfer, Gypsum Truck/Rail Discharge into Hopper	PM_{10}	0.1	0.1
502.T2	Transfer, Clinker Truck Discharge into Hopper	PM_{10}	0.6	0.2

2. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
41A.T10	Transfer, Rail and Truck Unloading into 41A.HP10	PM	0.4	0.1
44A.T10	Transfer, Loader Unloading into 44A.HP10	PM	0.2	0.1
403.CHM	Chute, Truck Loading of CKD	PM	0.1	0.1
403.CHR	Chute, CKD Truck Loadout	PM	0.1	0.1
403.CHU	Chute, Truck Loading of CKD	PM	0.1	0.1
403.T1	Transfer, Truck Unloading of CKD	PM	0.1	0.1
403.T2	Transfer, Trailer Unloading of CKD	PM	0.1	0.1
449.HP2	Hopper, Outside Clinker Reclaim	PM	0.2	0.1
449.T1	Transfer, Outside Clinker Belt Discharge	PM	0.5	1.9
449.T2	Transfer, Clinker Railcar and Truck Hopper Unloading	PM	1.0	0.5
449.T3	Transfer, Clinker Discharge to Railcar/Truck	PM	1.0	0.5
449.T4	Transfer, Loader to 449.HP2	PM	0.2	0.1
533.LS10	Transfer from 511.BI100 to Truck	PM	0.8	0.4
502.CH3	Chute, Discharge of Gypsum Belt	PM	0.3	0.3
502.T1	Transfer, Gypsum Truck/Rail Discharge into	PM	0.1	0.1

	Hopper			
502.T2	Transfer, Clinker Truck Discharge into Hopper	PM	0.6	0.2

3. These sources are considered affected sources under 40 CFR Part 63, Subpart LLL, and are subject to the standards for transfer points listed in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart LLL]

40 CFR 63, Subpart LLL	
40 CFR 63, §63.1340(a)	(a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.
40 CFR 63, §63.1340(c)	(c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.
40 CFR 63, §63.1340(d)	(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.
40 CFR 63, §63.1348	The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.
40 CFR 63, §63.1349(a)	(a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.
40 CFR 63, §63.1349(a)(1)	(1) A brief description of the process and the air pollution control system;
40 CFR 63, §63.1349(a)(2)	(2) Sampling location description(s);

40 CFR 63, §63.1349(a)(3)	(3) A description of sampling and analytical procedures and any modifications to standard procedures;
40 CFR 63, §63.1349(a)(4)	(4) Test results;
40 CFR 63, §63.1349(a)(5)	(5) Quality assurance procedures and results;
40 CFR 63, §63.1349(a)(6)	(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
40 CFR 63, §63.1349(a)(7)	(7) Raw data sheets for field sampling and field and laboratory analyses;
40 CFR 63, §63.1349(a)(8)	(8) Documentation of calculations;
40 CFR 63, §63.1349(a)(9)	(9) All data recorded and used to establish parameters for compliance monitoring; and
40 CFR 63, §63.1349(a)(10)	(10) Any other information required by the test method.
40 CFR 63, §63.1349(b)(2)	(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (ii) of this section apply:
40 CFR 63, §63.1349(b)(2)(i)	(i) There are no individual readings greater than 10 percent opacity;
40 CFR 63, §63.1349(b)(2)(ii)	(ii) There are no more than three readings of 10 percent for the first 1-hour period.
40 CFR 63, §63.1350(a)(4)(i)	(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.
40 CFR 63, §63.1350(a)(4)(ii)	(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

40 CFR 63, §63.1350(a)(4)(iii)	(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
40 CFR 63, §63.1350(a)(4)(iv)	(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.
40 CFR 63, §63.1350(a)(4)(v)	(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
40 CFR 63, §63.1350(a)(4)(vi)	(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.
40 CFR 63, §63.1350(a)(4)(vii)	(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.
40 CFR 63, §63.1350(b)	(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph (a) of this section shall be a violation of the standard.
40 CFR 63, §63.1350(j)	(j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.
40 CFR 63, §63.1351(b)	(b) The compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998 is June 14, 1999 or upon startup of operations, whichever is later.

40 CFR 63, §63.1353(a)	(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.
40 CFR 63, §63.1353(b)	(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:
40 CFR 63, §63.1353(b)(1)	(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
40 CFR 63, §63.1353(b)(2)	(2) Notification of performance tests, as required by §§63.7 and 63.9(e).
40 CFR 63, §63.1353(b)(3)	(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).
40 CFR 63, §63.1353(b)(4)	(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.
40 CFR 63, §63.1353(b)(5)	(5) Notification of compliance status, as required by §63.9(h).
40 CFR 63, §63.1354(a)	(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.
40 CFR 63, §63.1354(b)	(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:
40 CFR 63, §63.1354(b)(1)	(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
40 CFR 63, §63.1354(b)(2)	(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.
40 CFR 63, §63.1354(b)(3)	(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

40 CFR 63, §63.1354(b)(4)	(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and
40 CFR 63, §63.1354(b)(5)	(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
40 CFR 63, §63.1354(b)(6)	(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
40 CFR 63, §63.1354(b)(7)	(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).
40 CFR 63, §63.1354(b)(8)	(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.
40 CFR 63, §63.1354(b)(9)	(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:
40 CFR 63, §63.1354(b)(9)(v)	(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).
40 CFR 63, §63.1354(b)(10)	(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

40 CFR 63, §63.1355(a)	(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
40 CFR 63, §63.1355(b)	(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and
40 CFR 63, §63.1355(b)(1)	(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;
40 CFR 63, §63.1355(b)(2)	(2) All records of applicability determination, including supporting analyses; and
40 CFR 63, §63.1355(b)(3)	(3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.
40 CFR 63, §63.1355(c)	(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

Dust Collectors Subject to 40 CFR 63, Subpart LLL

Source Description

Emissions from these transfer points located throughout the facility are controlled by dust collectors.

Specific Conditions

4. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
514.BF1	Dust Collector on Bin #44	PM_{10}	0.3	1.0
514.BF2	Dust Collector, #2 Finish Mill	PM_{10}	0.7	3.0
514.BF3	Dust Collector, #2 Finish Mill Discharge	PM_{10} VOC	0.5 1.3	2.0 1.3
514.BF5	Dust Collector, B Belt	PM_{10}	0.1	0.1
524.BF1	Dust Collector, #4 Finish Mill Discharge	PM_{10} VOC	1.0 4.2	4.2 4.2
524.BF2	Dust Collector, #4 Finish Mill	PM_{10}	1.5	6.6
611.BF1	Dust Collector, Rail DC#24	PM_{10}	0.6	2.4
611.BF10	Dust Collector, Silos 19 and 20 Discharge to Elevator	PM_{10}	0.1	0.5
611.BF2	Dust Collector, Rail Silo #25	PM_{10}	0.4	1.9
611.BF20	Dust Collector, Elevator Discharge	PM_{10}	0.1	0.3
611.BF30	Dust Collector, Rail Loadout Bin Vent	PM_{10}	0.2	0.6
611.BF40	Dust Collector, Outside Cement Loading to Rail	PM_{10}	0.1	0.3
403.BF3	Dust Collector, 500 Ton Silos	PM_{10}	0.3	1.3
403.BF4	Dust Collector, 1500 Ton Silo	PM_{10}	0.5	1.9
403.BF6	Dust Collector, 1500 Ton Silo	PM_{10}	0.4	1.6
403.BF7	Dust Collector, CKD Truck Loadout DC-61	PM_{10}	0.2	0.7

403.BF8	Dust Collector, 500 Ton Silos	PM_{10}	0.3	1.3
612.BF1	Dust Collector, Kaiser Silos DC #21	PM_{10}	0.5	2.1
612.BF2	Dust Collector	PM_{10}	0.2	0.8
612.BF3	Dust Collector, Kaiser Silos DC #22	PM_{10}	0.2	0.7
612.BF4	Dust Collector, Kaiser Silo DC #30	PM_{10}	0.2	0.7
612.BF5	Dust Collector, Geocem DC #26	PM_{10}	0.7	3.0
612.BF6	Dust Collector, Masonry Rail Loadout	PM_{10}	0.6	2.4
621.BF1	Dust Collector, Delta Silo DC #23	PM_{10}	0.6	2.5
621.BF2	Dust Collector, Truck Loadout DC #28	PM_{10}	0.5	1.9
621.BF3	Dust Collector, Truck Loadout DC #31/32	PM_{10}	0.2	0.8
621.BF5	Dust Collector, Truck Loadout DC #49	PM_{10}	0.7	3.0
449.BF20	Dust Collector, Clinker Bin Vents	PM_{10}	0.2	0.6
449.BF30	Dust Collector, Clinker Reclaim Elevator	PM_{10}	0.4	1.5
449.BF40	Dust Collector, Clinker Dome Vent	PM_{10}	0.5	2.1
449.BF46	Dust Collector, Clinker Reclaim Conveyor 449.BC05 Discharge	PM_{10}	0.2	0.6
449.BF50	Dust Collector, Clinker Reclaim Conveyor Transfer	PM_{10}	0.2	0.9
511.BF1	Dust Collector, Outside Clinker Bins Discharge	PM_{10}	0.2	0.8
521.BF1	Dust Collector, West Clinker Silo	PM_{10}	0.6	2.6
521.BF2	Dust Collector, East Clinker Silo	PM_{10}	0.6	2.6
523.BF2	Dust Collector, Clinker Receiving	PM_{10}	0.1	0.1
531.BF10	Dust Collector, 531BC.10 Discharge	PM_{10}	0.3	1.0
531.BF20	Dust Collector, Limestone, Gypsum Bins Vent	PM_{10}	0.3	1.0
533.BF10	Dust Collector, Finish Mill Feed Bins Discharge	PM_{10}	0.2	0.9

44B.BF30	Dust Collector, Pulverized Fuel Bin 44C.BI10 Vent	PM_{10}	0.1	0.1
502.BF1	Dust Collector, Gypsum/Clinker Railcar Loadout	PM_{10}	0.2	0.8
502.BF2	Dust Collector, Clinker Receiving DC-54	PM_{10}	0.2	0.8
449.BF10	Dust Collector, Clinker Cooler Discharge	PM_{10}	0.1	0.4
327.BF30	Dust Collector, Raw Material Airslide 327.AS05	PM_{10}	0.2	0.9
441.BF10	Dust Collector, Blending Silo 441.SI10 Vent	PM_{10}	0.4	0.6
442.BF10	Dust Collector, Kiln Feed Airslide 442.AS10	PM_{10}	0.2	0.6
442.BF20	Dust Collector, Kiln Feed System	PM_{10}	0.2	0.9
443.BF20	Dust Collector, Cement Kiln Dust Bin 443.BI10	PM_{10}	0.2	0.6
326.BF10	Dust Collector, Raw Mill Feed System	PM_{10}	0.4	1.6
326.BF20	Dust Collector, Reject Loading Spout 326.LS10	PM_{10}	0.1	0.3
326.BF30	Dust Collector, Raw Mill Rejects	PM_{10}	0.4	1.4
327.BF10	Dust Collector, Raw Material Airslide 327.AS03	PM_{10}	0.2	0.8
327.BF20	Dust Collector, Raw Material Airslide 327.AS04	PM_{10}	0.2	0.6
329.BF10	Dust Collector, High Grade Limestone Bin 329.BI01	PM_{10}	0.2	0.7
329.BF20	Dust Collector, Alleviator 329.AV01 Deaeration	PM_{10}	0.1	0.4
534.BF10	Dust Collector, Finish Mill Feed System	PM_{10}	0.3	1.2
534.BF20	Dust Collector, Finish Mill Recirculation System	PM_{10}	0.3	1.0
535.BF10	Dust Collector, Finish Mill 534.RM10 Discharge	PM_{10} VOC	2.0 5.2	5.1 5.2
535.BF20	Dust Collector, Pneumatic Conveying System to Storage	PM_{10}	0.1	0.5

5. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide

Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
514.BF1	Dust Collector on Bin #44	PM	0.3	1.0
514.BF2	Dust Collector, #2 Finish Mill	PM	0.7	3.0
514.BF3	Dust Collector, #2 Finish Mill Discharge	PM Ethylene Glycol Diethanolamine	0.5 0.1 0.1	2.0 0.1 0.1
514.BF5	Dust Collector, B Belt	PM	0.1	0.1
524.BF1	Dust Collector, #4 Finish Mill Discharge	PM Ethylene Glycol Diethanolamine	1.0 0.1 0.1	4.2 0.1 0.1
524.BF2	Dust Collector, #4 Finish Mill	PM	1.5	6.6
611.BF1	Dust Collector, Rail DC#24	PM	0.6	2.4
611.BF10	Dust Collector, Silos 19 and 20 Discharge to Elevator	PM	0.1	0.5
611.BF2	Dust Collector, Rail Silo #25	PM	0.4	1.9
611.BF20	Dust Collector, Elevator Discharge	PM	0.1	0.3
611.BF30	Dust Collector, Rail Loadout Bin Vent	PM	0.2	0.6
611.BF40	Dust Collector, Outside Cement Loading to Rail	PM	0.1	0.3
403.BF3	Dust Collector, 500 Ton Silos	PM	0.3	1.3
403.BF4	Dust Collector, 1500 Ton Silo	PM	0.5	1.9
403.BF6	Dust Collector, 1500 Ton Silo	PM	0.4	1.6
403.BF7	Dust Collector, CKD Truck Loadout DC-61	PM	0.2	0.7
403.BF8	Dust Collector, 500 Ton Silos	PM	0.3	1.3
612.BF1	Dust Collector, Kaiser Silos DC #21	PM	0.5	2.1

612.BF2	Dust Collector	PM	0.2	0.8
612.BF3	Dust Collector, Kaiser Silos DC #22	PM	0.2	0.7
612.BF4	Dust Collector, Kaiser Silo DC #30	PM	0.2	0.7
612.BF5	Dust Collector, Geocem DC #26	PM	0.7	3.0
612.BF6	Dust Collector, Masonry Rail Loadout	PM	0.6	2.4
621.BF1	Dust Collector, Delta Silo DC #23	PM	0.6	2.5
621.BF2	Dust Collector, Truck Loadout DC #28	PM	0.5	1.9
621.BF3	Dust Collector, Truck Loadout DC #31/32	PM	0.2	0.8
621.BF5	Dust Collector, Truck Loadout DC #49	PM	0.7	3.0
449.BF20	Dust Collector, Clinker Bin Vents	PM	0.2	0.6
449.BF30	Dust Collector, Clinker Reclaim Elevator	PM	0.4	1.5
449.BF40	Dust Collector, Clinker Dome Vent	PM	0.5	2.1
440.BF46	Dust Collector, Clinker Reclaim Conveyor 449.BC05 Discharge	PM	0.2	0.6
449.BF50	Dust Collector, Clinker Reclaim Conveyor Transfer	PM	0.2	0.9
511.BF1	Dust Collector, Outside Clinker Bins Discharge	PM	0.2	0.8
521.BF1	Dust Collector, West Clinker Silo	PM	0.6	2.6
521.BF2	Dust Collector, East Clinker Silo	PM	0.6	2.6
523.BF2	Dust Collector, Clinker Receiving	PM	0.1	0.1
531.BF10	Dust Collector, 531BC.10 Discharge	PM	0.3	1.0
531.BF20	Dust Collector, Limestone, Gypsum Bins Vent	PM	0.3	1.0
533.BF10	Dust Collector, Finish Mill Feed Bins	PM	0.2	0.9

	Discharge			
44B.BF30	Dust Collector, Pulverized Fuel Bin 44C.BI10 Vent	PM	0.1	0.1
502.BF1	Dust Collector, Gypsum/Clinker Railcar Loadout	PM	0.2	0.8
502.BF2	Dust Collector, Clinker Receiving DC-54	PM	0.2	0.8
449.BF10	Dust Collector, Clinker Cooler Discharge	PM	0.1	0.4
327.BF30	Dust Collector, Raw Material Airslide 327.AS05	PM	0.2	0.9
441.BF10	Dust Collector, Blending Silo 441.SI10 Vent	PM	0.4	0.6
442.BF10	Dust Collector, Kiln Feed Airslide 442.AS10	PM	0.2	0.6
442.BF20	Dust Collector, Kiln Feed System	PM	0.2	0.9
443.BF20	Dust Collector, Cement Kiln Dust Bin 443.BI10	PM	0.2	0.6
326.BF10	Dust Collector, Raw Mill Feed System	PM	0.4	1.6
326.BF20	Dust Collector, Reject Loading Spout 326.LS10	PM	0.1	0.3
326.BF30	Dust Collector, Raw Mill Rejects	PM	0.4	1.4
327.BF10	Dust Collector, Raw Material Airslide 327.AS03	PM	0.2	0.8
327.BF20	Dust Collector, Raw Material Airslide 327.AS04	PM	0.2	0.6
329.BF10	Dust Collector, High Grade Limestone Bin 329.BI01	PM	0.2	0.7
329.BF20	Dust Collector, Alleviator 329.AV01 Deaeration	PM	0.1	0.4

534.BF10	Dust Collector, Finish Mill Feed System	PM	0.3	1.2
534.BF20	Dust Collector, Finish Mill Recirculation System	PM	0.3	1.0
535.BF10	Dust Collector, Finish Mill 534.RM10 Discharge	PM Ethylene Glycol Diethanolamine	2.0 0.1 0.1	5.1 0.1 0.1
535.BF20	Dust Collector, Pneumatic Conveying System to Storage	PM	0.1	0.5

6. These sources are considered affected sources under 40 CFR Part 63, Subpart LLL, and are subject to the standards for dust collectors listed in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart LLL]

40 CFR 63, Subpart LLL	
40 CFR 63, §63.1340(a)	(a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.
40 CFR 63, §63.1340(c)	(c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just prior to the raw mill. Any equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage is not subject to this subpart. In addition, the primary and secondary crushers of the on-site nonmetallic mineral processing plant, regardless of whether they precede the raw material storage, are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.
40 CFR 63, §63.1340(d)	(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.
40 CFR 63, §63.1348	The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.

40 CFR 63, §63.1349(a)	(a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.
40 CFR 63, §63.1349(a)(1)	(1) A brief description of the process and the air pollution control system;
40 CFR 63, §63.1349(a)(2)	(2) Sampling location description(s);
40 CFR 63, §63.1349(a)(3)	(3) A description of sampling and analytical procedures and any modifications to standard procedures;
40 CFR 63, §63.1349(a)(4)	(4) Test results;
40 CFR 63, §63.1349(a)(5)	(5) Quality assurance procedures and results;
40 CFR 63, §63.1349(a)(6)	(6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
40 CFR 63, §63.1349(a)(7)	(7) Raw data sheets for field sampling and field and laboratory analyses;
40 CFR 63, §63.1349(a)(8)	(8) Documentation of calculations;
40 CFR 63, §63.1349(a)(9)	(9) All data recorded and used to establish parameters for compliance monitoring; and
40 CFR 63, §63.1349(a)(10)	(10) Any other information required by the test method.
40 CFR 63, §63.1349(b)(2)	(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). The maximum 6-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (ii) of this section apply:
40 CFR 63, §63.1349(b)(2)(i)	(i) There are no individual readings greater than 10 percent opacity;
40 CFR 63, §63.1349(b)(2)(ii)	(ii) There are no more than three readings of 10 percent for the first 1-hour period.

40 CFR 63, §63.1350(a)(4)(i)	(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.
40 CFR 63, §63.1350(a)(4)(ii)	(ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
40 CFR 63, §63.1350(a)(4)(iii)	(iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
40 CFR 63, §63.1350(a)(4)(iv)	(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.
40 CFR 63, §63.1350(a)(4)(v)	(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
40 CFR 63, §63.1350(a)(4)(vi)	(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.
40 CFR 63, §63.1350(a)(4)(vii)	(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.
40 CFR 63, §63.1350(b)	(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph (a) of this section shall be a violation of the standard.

40 CFR 63, §63.1350(j)	(j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.
40 CFR 63, §63.1351(b)	(b) The compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998 is June 14, 1999 or upon startup of operations, whichever is later.
40 CFR 63, §63.1353(a)	(a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.
40 CFR 63, §63.1353(b)	(b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:
40 CFR 63, §63.1353(b)(1)	(1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
40 CFR 63, §63.1353(b)(2)	(2) Notification of performance tests, as required by §§63.7 and 63.9(e).
40 CFR 63, §63.1353(b)(3)	(3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).
40 CFR 63, §63.1353(b)(4)	(4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.
40 CFR 63, §63.1353(b)(5)	(5) Notification of compliance status, as required by §63.9(h).
40 CFR 63, §63.1354(a)	(a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.
40 CFR 63, §63.1354(b)	(b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:

40 CFR 63, §63.1354(b)(1)	(1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
40 CFR 63, §63.1354(b)(2)	(2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.
40 CFR 63, §63.1354(b)(3)	(3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.
40 CFR 63, §63.1354(b)(4)	(4) As required by §63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and
40 CFR 63, §63.1354(b)(5)	(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
40 CFR 63, §63.1354(b)(6)	(6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
40 CFR 63, §63.1354(b)(7)	(7) As required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).
40 CFR 63, §63.1354(b)(8)	(8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

40 CFR 63, §63.1354(b)(9)	(9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:
40 CFR 63, §63.1354(b)(9)(v)	(v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).
40 CFR 63, §63.1354(b)(10)	(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.
40 CFR 63, §63.1355(a)	(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.
40 CFR 63, §63.1355(b)	(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and
40 CFR 63, §63.1355(b)(1)	(1) All documentation supporting initial notifications and notifications of compliance status under §63.9;
40 CFR 63, §63.1355(b)(2)	(2) All records of applicability determination, including supporting analyses; and
40 CFR 63, §63.1355(c)	(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

Uncontrolled Material Handling Emissions Points

Source Description

Emissions from these transfer points located throughout the facility are not controlled.

Specific Conditions

7. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
311.CH1	Chute, Secondary Crusher Discharge	PM_{10}	0.1	0.1
311.CH10	Chute, Limestone Hopper to 311.AF6	PM_{10}	0.1	0.1
311.CH11	Chute, 311.AF6 to 311.BC1	PM_{10}	0.1	0.1
311.CH15	Chute, Gypsum Hopper to 311.AF5	PM_{10}	0.1	0.1
311.CH16	Chute, 311.AF5 to 311.BC1	PM_{10}	0.1	0.1
311.CHC	Chute, Discharge into Secondary Crusher	PM_{10}	0.1	0.1

8. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
311.CH1	Chute, Secondary Crusher Discharge	PM	0.1	0.1
311.CH10	Chute, Limestone Hopper to 311.AF6	PM	0.1	0.1
311.CH11	Chute, 311.AF6 to 311.BC1	PM	0.1	0.1
311.CH15	Chute, Gypsum Hopper to 311.AF5	PM	0.1	0.1

311.CH16	Chute, 311.AF5 to 311.BC1	PM	0.1	0.1
311.CHC	Chute, Discharge into Secondary Crusher	PM	0.1	0.1

9. The opacity from sources 311.CH1 and 311.CHC shall not exceed 40%. Compliance with the opacity standard shall be demonstrated through compliance with Specific Condition 11. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

10. The opacity from sources 311.CH10, 311.CH11, 311, CH15 and 311.CH16 shall not exceed 20%. Compliance with the opacity standard shall be demonstrated through compliance with Specific Condition 11. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

11. Weekly visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for these sources. The weekly observations shall be conducted by someone familiar with the facility's visible emissions.

    a. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

        i. Take immediate action to identify the cause of the visible emissions,
        ii. Implement corrective action, and
        iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
        iv. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

    b. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

        i. The time and date of each observation/reading,
        ii. The results of the observations,
        iii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
        iv. The name of the person conducting the observation/reading.

    [Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-211.BF1 & 311.BF1

Dust Collector, Primary Crusher & Secondary Crusher

Source Description

Quarried chalk is crushed at SN-211.BF1 (primary crusher) before being hauled to the raw materials storage area. This source was installed prior to the applicability date of NSPS Subpart OOO. SN-311.BF1 (secondary crusher) is used to crush some of the raw materials used at this facility. Chalk, sand, and iron ore are crushed and then transported to the mill building by a conveyor belt.

Specific Conditions

12. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
211.BF1	PM_{10}	0.5	1.9
311.BF1	PM_{10}	0.2	0.8

13. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
211.BF1	PM	0.5	1.9
311.BF1	PM	0.2	0.8

14. Visible emissions from these sources shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Specific Condition 15. [§19.501 of Regulation 19 and 40 CFR part 52, Subpart E]

15. Weekly visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for these sources. The weekly observations shall be conducted by someone familiar with the facility's visible emissions.

a. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

i. Take immediate action to identify the cause of the visible emissions,
ii. Implement corrective action, and
iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
iv. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

b. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

i. The time and date of each observation/reading,
ii. The results of the observations,
iii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
iv. The name of the person conducting the observation/reading.

[Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-211.CR2, 211.CH8, 211.T10 & 211.ED10
Crusher (Brick), Transfer (211.BC10 to 211.BC1), Transfer (Unloading to 211.HP1) and Crusher Diesel Engine (211.ED10)

Source Description

This source is used to crush used refractory brick from the lining of the kilns. The crushed brick is fed back to the process as a raw material. The crusher is powered by a diesel engine (211.ED10)

Specific Conditions

16. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 18. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
211.CR2	PM_{10}	0.1	0.1
211.CH8	PM_{10}	0.1	0.1
211.T10	PM_{10}	0.1	0.1
211.ED10	PM_{10} SO_2 VOC CO NO_x	0.2 0.2 0.2 0.6 2.5	0.1 0.1 0.1 0.3 1.3

17. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 18. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
211.CR2	PM	0.1	0.1
211.CH8	PM	0.1	0.1
211.T10	PM	0.1	0.1
211.ED10	PM	0.2	0.1

18. The permittee shall not crush more than 5,000 tons of brick at SN-211.CR2 per consecutive twelve month period. This source shall not operate in excess of 1000 hours

per consecutive twelve month period. Only Number 2 fuel oil with a sulfur content not greater than 0.5% by weight shall be used as fuel in the crusher engine. Compliance shall be demonstrated through compliance with Specific Condition 19. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

19. The permittee shall maintain records of the amount of brick crushed and the hours of operation for SN-211.CR2. The permittee shall maintain records of the sulfur content of the fuel oil used to fire the diesel engine. The records shall be updated as needed. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004, Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

20. The opacity from sources 211.CR2, 211.CH8, 211.T10 and 211.ED10 shall not exceed 20%. Compliance with the opacity standard shall be demonstrated through compliance with Specific Condition 21. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

21. Weekly visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for these sources. The weekly observations shall be conducted by someone familiar with the facility's visible emissions.

    a. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

        i. Take immediate action to identify the cause of the visible emissions,
        ii. Implement corrective action, and
        iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
        iv. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

    b. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

        i. The time and date of each observation/reading,
        ii. The results of the observations,
        iii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and

iv. The name of the person conducting the observation/reading.

[Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Storage Piles

Source Description

Raw materials and intermediates are stored in piles at various locations throughout the facility.

Specific Conditions

22. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 24 through 31. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
403.P1	Pile, CKD	PM_{10}	1.4	5.8
449.P1	Pile, Outside Clinker Storage	PM_{10}	0.1	0.2
41A.P1	A-frame Coal/Coke Pile	PM_{10}	0.1	0.1
41A.P2	A-frame Gypsum Pile	PM_{10}	0.1	0.1
41A.P3	A-frame Limestone Pile	PM_{10}	0.1	0.1
41A.P5	Outside Coal/Coke Pile	PM_{10}	0.1	0.3
41A.P6	Outside Gypsum Pile	PM_{10}	0.1	0.1
41A.P7	Outside Limestone Pile	PM_{10}	0.1	0.1

23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Conditions 24 through 31. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
403.P1	Pile, CKD	PM	1.4	5.8
449.P1	Pile, Outside Clinker Storage	PM	0.1	0.2
41A.P1	A-frame Coal/Coke Pile	PM	0.1	0.1
41A.P2	A-frame Gypsum Pile	PM	0.1	0.1
41A.P3	A-frame Limestone Pile	PM	0.1	0.1

41A.P5	Outside Coal/Coke Pile	PM	0.1	0.3
41A.P6	Outside Gypsum Pile	PM	0.1	0.1
41A.P7	Outside Limestone Pile	PM	0.1	0.1

24. The permittee shall maintain the area of SN-403.P1 at or below 20 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

25. The permittee shall maintain the area of SN-449.P1 at or below 4 acres. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

26. The permittee shall maintain the area of the A-frame storage pile for Emission Points 41.AP1, 41.AP2 and 41.AP3 at or below 40,143 ft^2, or 0.92 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the A-frame structure. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

27. The permittee shall maintain the area of SN-41A.P5 at or below 45,000 ft^2, or 1.03 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

28. The permittee shall maintain the area of SN-41A.P6 at or below 22,500 ft^2, or 0.52 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

29. The outside gypsum pile (SN-41A.P6) will be kept covered with a tarp, except during normal pile loading and unloading operations. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

30. The permittee shall maintain the area of SN-41A.P7 at or below 4,000 ft^2, or 0.09 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

31. The permittee shall maintain the area of SN-221.RMB1 to the square footage of the new raw material building, 214,700 ft^2, or 4.93 acres. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the raw material building. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

32. Visible emissions from these sources shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Specific Condition 33. [Regulation 19, §19.503 and 40 CFR part 52, Subpart E]

33. Weekly visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for these sources. The weekly observations shall be conducted by someone familiar with the facility's visible emissions.

a. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

i. Take immediate action to identify the cause of the visible emissions,
ii. Implement corrective action, and
iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
iv. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

b. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

i. The time and date of each observation/reading,
ii. The results of the observations,
iii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
iv. The name of the person conducting the observation/reading.

[Regulation 18, §18.1004 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Dust Collectors subject to 40 CFR 60, Subpart OOO

Source Description

These baghouses located throughout the facility are subject to Subpart OOO.

Specific Conditions

34. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
41A.BF10	Dust Collector, Coal/Coke/Gypsum Unloading	PM_{10}	0.3	1.0
41A.BF20	Dust Collector, Coal/Coke/Gypsum Storage Discharge	PM_{10}	0.3	1.2
44A.BF10	Dust Collector, Apron Feeder 44A.AF10	PM_{10}	0.3	1.0
213.BF10	Dust Collector, Sand and Iron Unloading	PM_{10}	0.3	1.0
213.BF20	Dust Collector, Sand and Iron Transport	PM_{10}	0.5	1.9
213.BF30	Dust Collector, Iron Spout Discharge	PM_{10}	0.1	0.4
213.BF40	Dust Collector, Sand Spout Discharge	PM_{10}	0.1	0.4
221.BF10	Dust Collector, Stacker Transfer	PM_{10}	0.4	1.8
323.BF10	Dust Collector, Sand and Iron to Bins	PM_{10}	0.3	1.0
325.BF10	Dust Collector, Limestone Bin 325.BN01	PM_{10}	0.4	1.4
325.BF20	Dust Collector, Raw Material Bins 325.BN04	PM_{10}	0.3	1.0
325.BF30	Dust Collector, Raw Material Discharge	PM_{10}	0.5	2.1

35. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
41A.BF10	Dust Collector, Coal/Coke/Gypsum Unloading	PM	0.3	1.0
41A.BF20	Dust Collector, Coal/Coke/Gypsum Storage Discharge	PM	0.3	1.2
44A.BF10	Dust Collector, Apron Feeder 44A.AF10	PM	0.3	1.0
213.BF10	Dust Collector, Sand and Iron Unloading	PM	0.3	1.0
213.BF20	Dust Collector, Sand and Iron Transport	PM	0.5	1.9
213.BF30	Dust Collector, Iron Spout Discharge	PM	0.1	0.4
213.BF40	Dust Collector, Sand Spout Discharge	PM	0.1	0.4
221.BF10	Dust Collector, Stacker Transfer	PM	0.4	1.8
323.BF10	Dust Collector, Sand and Iron to Bins	PM	0.3	1.0
325.BF10	Dust Collector, Limestone Bin 325.BN01	PM	0.4	1.4
325.BF20	Dust Collector, Raw Material Bins 325.BN04	PM	0.3	1.0
325.BF30	Dust Collector, Raw Material Discharge	PM	0.5	2.1

36. These sources are considered affected sources under 40 CFR Part 60, Subpart OOO, and are subject to the standards for dust collectors listed in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart OOO]

40 CFR 60, Subpart OOO	
40 CFR 60, §60.670(a)(1)	(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.
40 CFR 60, §60.670(f)	(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.
40 CFR 60, §60.672(a)	(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:
40 CFR 60, §60.672(a)(1)	(1) Contain particulate matter in excess of 0.05 g/dscm (0.022 gr/dscf); and
40 CFR 60, §60.672(a)(2)	(2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of §60.676 (c), (d), and (e).
40 CFR 60, §60.672(b)	(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.
40 CFR 60, §60.672(c)	(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.
40 CFR 60, §60.672(d)	(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
40 CFR 60, §60.672(e)	(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
40 CFR 60, §60.672(e)(1)	(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.

40 CFR 60, §60.672(e)(2)	(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.
40 CFR 60, §60.672(f)	(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.
40 CFR 60, §60.672(g)	(g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.
40 CFR 60, §60.672(h)	(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:
40 CFR 60, §60.672(h)(1)	(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.
40 CFR 60, §60.672(h)(2)	(2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.
40 CFR 60, §60.675(a)	(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.
40 CFR 60, §60.675(b)	(b) The owner or operator shall determine compliance with the particulate matter standards in §60.672(a) as follows:
40 CFR 60, §60.675(b)(1)	(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.
40 CFR 60, §60.675(b)(2)	(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.
40 CFR 60, §60.675(c)(1)	(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:
40 CFR 60, §60.675(c)(1)(i)	(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

40 CFR 60, §60.675(c)(1)(ii)	(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
40 CFR 60, §60.675(c)(2)	(2) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under §60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).
40 CFR 60, §60.675(c)(3)	(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
40 CFR 60, §60.675(c)(3)(i)	(i) There are no individual readings greater than 10 percent opacity; and
40 CFR 60, §60.675(c)(3)(ii)	(ii) There are no more than 3 readings of 10 percent for the 1-hour period.
40 CFR 60, §60.675(c)(4)	(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
40 CFR 60, §60.675(c)(4)(i)	(i) There are no individual readings greater than 15 percent opacity; and
40 CFR 60, §60.675(c)(4)(ii)	(ii) There are no more than 3 readings of 15 percent for the 1-hour period.
40 CFR 60, §60.675(d)	(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
40 CFR 60, §60.675(e)	(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
40 CFR 60, §60.675(e)(1)	(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
40 CFR 60, §60.675(e)(1)(i)	(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
40 CFR 60, §60.675(e)(1)(ii)	(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.
40 CFR 60, §60.675(f)	(f) To comply with §60.676(d), the owner or operator shall record the measurements as required in §60.676(c) using the monitoring devices in §60.674 (a) and (b) during each particulate matter run and shall determine the averages.

40 CFR 60, §60.675(g)	(g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.
40 CFR 60, §60.675(h)	(h) Initial Method 9 performance tests under §60.11 of this part and §60.675 of this subpart are not required for:
40 CFR 60, §60.675(h)(1)	(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to, but not including the next crusher, grinding mill or storage bin.
40 CFR 60, §60.675(h)(2)	(2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, that process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.
40 CFR 60, §60.676(f)	(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).
40 CFR 60, §60.676(g)	(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).
40 CFR 60, §60.676(h)	(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.
40 CFR 60, §60.676(i)	(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.
40 CFR 60, §60.676(i)(1)	(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

Material Transfer Points Subject to 40 CFR Part 60, Subpart OOO

Source Description

Uncontrolled emissions from these transfer points located throughout the facility are subject to Subpart OOO.

Specific Conditions

37. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
41A.T1	Transfer, 41A.BC20 to Gypsum Pile in Chalk Shed	PM_{10}	0.4	0.1
111.T10	Transfer, Truck Unloading into 111.HP1	PM_{10}	1.9	0.8
111.T12	Transfer, Truck Unloading into 111.HP2	PM_{10}	1.9	0.8
213.T1	Transfer, Truck Unloading to 213.HP010	PM_{10}	0.5	0.2
221.CH01	Chute, 221.BC10 to 221.ST10	PM_{10}	1.9	1.6
221.RMB1	Raw Material Building for Sand, Iron and Limestone	PM_{10}	0.1	0.2
221.T1	Transfer, Stacker Conveyor to Limestone Pile	PM_{10}	1.9	1.6
321.CH01	Chute, 321.RE10 to 321.BC10	PM_{10}	1.9	1.6
323.T1	Chute, Iron/Sand Reclaim to 323.AF10	PM_{10}	0.3	1.1

38. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
41A.T1	Transfer, 41A.BC20 to Gypsum Pile in Chalk Shed	PM	0.4	0.1

111.T10	Transfer, Truck Unloading into 111.HP1	PM	1.9	0.8
111.T12	Transfer, Truck Unloading into 111.HP2	PM	1.9	0.8
213.T1	Transfer, Truck Unloading to 213.HP010	PM	0.5	0.2
221.CH01	Chute, 221.BC10 to 221.ST10	PM	1.9	1.6
221.RMB1	Raw Material Building for Sand, Iron and Limestone	PM	0.1	0.2
221.T1	Transfer, Stacker Conveyor to Limestone Pile	PM	1.9	1.6
321.CH01	Chute, 321.RE10 to 321.BC10	PM	1.9	1.6
323.T1	Chute, Iron/Sand Reclaim to 323.AF10	PM	0.3	1.1

39. These sources are considered affected sources under 40 CFR Part 60, Subpart OOO, and are subject to the standards for transfer points listed in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart OOO]

40 CFR 60, Subpart OOO	
40 CFR 60, §60.670(a)(1)	(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.
40 CFR 60, §60.670(f)	(f) Table 1 of this subpart specifies the provisions of subpart A of this part 60 that apply and those that do not apply to owners and operators of affected facilities subject to this subpart.
40 CFR 60, §60.672(b)	(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d), and (e) of this section.

40 CFR 60, §60.672(c)	(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.
40 CFR 60, §60.672(d)	(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.
40 CFR 60, §60.672(e)	(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:
40 CFR 60, §60.672(e)(1)	(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in §60.671.
40 CFR 60, §60.672(e)(2)	(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.
40 CFR 60, §60.672(f)	(f) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup as required under §60.11 of this part, no owner or operator shall cause to be discharged into the atmosphere from any baghouse that controls emissions from only an individual, enclosed storage bin, stack emissions which exhibit greater than 7 percent opacity.
40 CFR 60, §60.672(g)	(g) Owners or operators of multiple storage bins with combined stack emissions shall comply with the emission limits in paragraph (a)(1) and (a)(2) of this section.
40 CFR 60, §60.672(h)	(h) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere any visible emissions from:
40 CFR 60, §60.672(h)(1)	(1) Wet screening operations and subsequent screening operations, bucket elevators, and belt conveyors that process saturated material in the production line up to the next crusher, grinding mill or storage bin.
40 CFR 60, §60.672(h)(2)	(2) Screening operations, bucket elevators, and belt conveyors in the production line downstream of wet mining operations, where such screening operations, bucket elevators, and belt conveyors process saturated materials up to the first crusher, grinding mill, or storage bin in the production line.
40 CFR 60, §60.675(a)	(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (e) of this section.

40 CFR 60, §60.675(b)(2)	(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.
40 CFR 60, §60.675(c)(1)	(c)(1) In determining compliance with the particulate matter standards in §60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in §60.11, with the following additions:
40 CFR 60, §60.675(c)(1)(i)	(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
40 CFR 60, §60.675(c)(1)(ii)	(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.
40 CFR 60, §60.675(c)(3)	(3) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
40 CFR 60, §60.675(c)(3)(i)	(i) There are no individual readings greater than 10 percent opacity; and
40 CFR 60, §60.675(c)(3)(ii)	(ii) There are no more than 3 readings of 10 percent for the 1-hour period.
40 CFR 60, §60.675(c)(4)	(4) When determining compliance with the fugitive emissions standard for any crusher at which a capture system is not used as described under §60.672(c) of this subpart, the duration of the Method 9 observations may be reduced from 3 hours (thirty 6-minute averages) to 1 hour (ten 6-minute averages) only if the following conditions apply:
40 CFR 60, §60.675(c)(4)(i)	(i) There are no individual readings greater than 15 percent opacity; and
40 CFR 60, §60.675(c)(4)(ii)	(ii) There are no more than 3 readings of 15 percent for the 1-hour period.
40 CFR 60, §60.675(d)	(d) In determining compliance with §60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.
40 CFR 60, §60.675(e)	(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:
40 CFR 60, §60.675(e)(1)	(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:
40 CFR 60, §60.675(e)(1)(i)	(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
40 CFR 60, §60.675(e)(1)(ii)	(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

40 CFR 60, §60.675(g)	(g) If, after 30 days notice for an initially scheduled performance test, there is a delay (due to operational problems, etc.) in conducting any rescheduled performance test required in this section, the owner or operator of an affected facility shall submit a notice to the Administrator at least 7 days prior to any rescheduled performance test.
40 CFR 60, §60.675(h)	(h) Initial Method 9 performance tests under §60.11 of this part and §60.675 of this subpart are not required for:
40 CFR 60, §60.676(e)	(e) The reports required under paragraph (d) shall be postmarked within 30 days following end of the second and fourth calendar quarters.
40 CFR 60, §60.676(f)	(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 to demonstrate compliance with §60.672(b), (c), and (f), and reports of observations using Method 22 to demonstrate compliance with §60.672(e).
40 CFR 60, §60.676(g)	(g) The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that processes unsaturated material but subsequently processes saturated material shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).
40 CFR 60, §60.676(h)	(h) The subpart A requirement under §60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.
40 CFR 60, §60.676(i)	(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.
40 CFR 60, §60.676(i)(1)	(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.
40 CFR 60, §60.676(i)(2)	(2) For portable aggregate processing plants, the notification of the actual date of initial startup shall include both the home office and the current address or location of the portable plant.

Sources Subject to 40 CFR Part 60, Subpart Y

Source Description

These are various coal processing sources throughout the facility.

Specific Conditions

40. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
41A.BF10*	Dust Collector, Coal/Coke/Gypsum Unloading	PM_{10}	0.3	1.0
41A.BF20*	Dust Collector, Coal/Coke/Gypsum Storage Discharge	PM_{10}	0.3	1.2
41A.T2	Transfer, 41A.BC20 to Coal/Coke Pile in Chalk Shed	PM_{10}	0.4	0.1
41A.T10[1]	Transfer, Rail and Truck Unloading into 41A.HP10	PM_{10}	0.4	0.1
44A.T10[1]	Transfer, Loader Unloading into 44A.HP10	PM_{10}	0.2	0.1
44A.BF10*	Dust Collector, Apron Feeder 44A.AF10	PM_{10}	0.3	1.0
44B.BF10	Dust Collector, Coal Coke Bin Vent	PM_{10}	0.1	0.5

*also subject to Subpart OOO as found in Specific Condition 39
1. also subject to Subpart LLL as found in Specific Condition 3

41. The permittee shall not exceed the emission rates set forth in the following table. Emission rates are based on the maximum capacity of the equipment and continuous operation. Compliance shall be demonstrated through compliance with Plantwide Condition 5. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
41A.BF10*	Dust Collector,	PM	0.3	1.0

	Coal/Coke/Gypsum Unloading			
41A.BF20*	Dust Collector, Coal/Coke/Gypsum Storage Discharge	PM	0.3	1.2
41A.T2	Transfer, 41A.BC20 to Coal/Coke Pile in Chalk Shed	PM	0.4	0.1
41A.T10[1]	Transfer, Rail and Truck Unloading into 41A.HP10	PM	0.4	0.1
44A.T10[1]	Transfer, Loader Unloading into 44A.HP10	PM	0.2	0.1
44A.BF10*	Dust Collector, Apron Feeder 44A.AF10	PM	0.3	1.0
44B.BF10	Dust Collector, Coal Coke Bin Vent	PM	0.1	0.5

* also subject to Subpart OOO as found in Specific Condition 39

1. also subject to Subpart LLL as found in Specific Condition 3

42. These sources are considered affected sources under 40 CFR Part 60, Subpart Y and are subject, but not limited to, the conditions found in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart Y]

40 CFR 60, Subpart Y	
40 CFR 60, §60.250(a)	(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.
40 CFR 60, §60.252(b)	(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any pneumatic coal cleaning equipment, gases which:
40 CFR 60, §60.252(b)(1)	(1) Contain particulate matter in excess of 0.040 g/dscm (0.017 gr/dscf).
40 CFR 60, §60.252(b)(2)	(2) Exhibit 10 percent opacity or greater.

40 CFR 60, §60.252(c)	(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.
40 CFR 60, §60.254(a)	(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
40 CFR 60, §60.254(b)	(b) The owner or operator shall determine compliance with the particular matter standards in §60.252 as follows:
40 CFR 60, §60.254(b)(1)	(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.
40 CFR 60, §60.254(b)(2)	(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

LWDF Sources

Source Description

Liquid waste derived fuels are received in rail tank cars and in tank trucks and stored in above ground storage tanks before being transferred to the kilns. To control VOC emissions, tanks are vented to a thermal oxidizer with a back up carbon adsorption system.

Specific Conditions

43. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 46. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
41F.BF10[2,3]	Dust Collector, Blending Silo 441.SI10 Vent	Vent to 41F.TX10		
41F.FT10[1,2,3]	Fuel Tanks			
41F.FT11[1,2,3]				
41F.TK10[2,3]	Thermal Oxidizer, BWDF Kiln Fuels			
41F.TX10[2,3]		PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.4 2.3 0.5	0.2 0.1 1.7 9.8 1.8
40F.FT3[1,2,3]	LWDF Tanks	Vent to 40F.TX1		
40F.FT4[1,2,3]				
40F.FT5[1,2,3]				
40F.FT6[1,2,3]				
40F.FT7[1,2,3]				
40F.FT8[1.2.3]				
40F.FT9[1,2,3]				
40F.FTA[1,2,3]				
40F.TX1[2,3]	Thermal Oxidizer, LWDF Tanks	PM_{10} VOC CO	0.1 1.0 0.6	0.1 4.4 2.5

		NO_x	0.1	0.5
RCC[3]	Rail Car Cleaning	VOC	0.7	1.0

1. Subject to 40 CFR 60, Subpart Kb as found in Specific Condition 49
2. Subject to 40 CFR 60, Subpart, FF as found in Specific Condition 50
3. Subject to 40 CFR 60, Subpart DD as found in Specific Condition 51

44. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 46. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
40F.FT3[1,2,3]	LWDF Tanks	Vent to 40F.TX1		
40F.FT4[1,2,3]				
40F.FT5[1,2,3]				
40F.FT6[1,2,3]				
40F.FT7[1,2,3]				
40F.FT8[1.2.3]				
40F.FT9[1,2,3]				
40F.FTA[1,2,3]				
40F.TX1[2,3]	Thermal Oxidizer, LWDF Tanks	Toluene Xylene	0.03 0.06	0.13 0.23

1. Subject to 40 CFR 60, Subpart Kb as found in Specific Condition 49
2. Subject to 40 CFR 60, Subpart, FF as found in Specific Condition 50
3. Subject to 40 CFR 60, Subpart DD as found in Specific Condition 51

45. Visible emissions from sources 40F.TX1 and 41F.TX10 shall not exceed 10% opacity. Compliance shall be demonstrated by using only natural gas as fuel in the thermal oxidizers. [Regulation 18, §18.501 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

46. The permittee shall determine the destruction efficiency of the thermal oxidizing unit either using an appropriate test method or through the use of engineering calculations. If testing is used, the test shall be performed a minimum of once every five years. The initial test shall be performed no later than 180 days after the initial startup date. This test shall be performed with this unit operating at or above 90% of its design capacity. This unit shall achieve a VOC destruction rate of not less than 95%. If engineering calculations are used, the permittee shall maintain a complete design analysis of the unit

which shall contain documentation necessary to demonstrate the performance of the unit. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

47. The permittee shall maintain the temperature in the combustion chamber of the thermal oxidizer at or above 1500°F. To demonstrate compliance, the permittee shall install, calibrate, and maintain a continuous temperature recorder on the catalytic oxidizer used to control emissions from these sources. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

48. During operation of the dual carbon canister system as a replacement for thermal oxidizer at this source, the permittee shall use good engineering judgment and/or vendor recommendations to determine the frequency to observe the condition of the breakthrough indicators on the carbon canisters in the absorption train. Observation of the breakthrough indicators on the carbon canisters shall occur no less often than the conclusion of each operating shift in which working losses were directed through the carbon canister absorption train. If breakthrough is detected, the system shall be reconfigured and, as necessary, canisters shall be recharged. The permittee shall maintain a log of the observations of the breakthrough indicators and the recharging of the carbon canisters. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

49. These sources are considered affected sources under 40 CFR Part 60, Subpart Kb and are subject, but not limited to, the conditions found in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart Kb]

40 CFR Part 60, Subpart Kb	
[§19.304 of Regulation 19 and 40 CFR Part 60, §60.112b(a)]	Each storage vessel with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa, but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3, but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa, but less than 76.6 kPa, shall equip each storage vessel with the following:
[§60.112b(a)(3)]	a. These vessels shall be equipped with a closed vent system and control device meeting the following specifications:
[§60.112b(a)(3)]	i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections as determined in Part 60, Subpart VV, §60.485(b).
[§60.112b(a)(3)]	ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.

[§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]	Each source that is equipped with a closed vent system and control device (the thermal oxidizer at this facility) as required in §60.112b(a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements:
[§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]	a. Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.
[§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]	i. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuel types from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816°C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.
[§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]	ii. A description of the parameter or parameters to be monitored to insure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).
[§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]	b. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modification applies.
[§19.304 of Regulation 19 and 40 CFR 60, §60.115b]	The permittee shall maintain records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least two years. The record required by (c)(1) will be kept for the life of the control equipment.
[§19.304 of Regulation 19 and 40 CFR 60, §60.115b(c)]	After installing control equipment in accordance with §60.112b(a)(3) or (b)(1) (closed vent system and control device other than a flare), the permittee shall keep the following records.

[§19.304 of Regulation 19 and 40 CFR 60, §60.115b(c)]	a. A copy of the operating plan.
[§19.304 of Regulation 19 and 40 CFR 60, §60.115b(c)]	b. A record of the measured values of the parameters monitored in accordance with §60.112b(c)(2).
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(a)]	The permittee shall keep copies of all records required by this section, except for records required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section shall be kept for the life of the source.
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(b)]	The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage tank with a design capacity less than 75 m^3 is subject to no provision of this subpart other than those required by this paragraph.
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(e)]	For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based on the highest expected calendar month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based on the maximum local monthly average ambient temperature as reported by the National Weather Service.
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	i. ASTM Method D2879-83 (incorporated by reference-see §60.17); or
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	ii. ASTM Method D323-82 (incorporated by reference-see §60.17); or
[§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]	iii. As measured by an appropriate method as approved by the Administrator.

50. These sources are considered affected sources under 40 CFR Part 61, Subpart FF and are subject, but not limited to, the conditions found in the following table. [Regulation 19, §19.304 and 40 CFR Part 61, Subpart FF]

40 CFR Part 61, Subpart FF	
40 CFR 61, §61.340(b)	(b) The provisions of this subpart apply to owners and operators of hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by any facility listed in paragraph (a) of this section. The waste streams at hazardous waste treatment, storage, and disposal facilities subject to the provisions of this subpart are the benzene-containing hazardous waste from any facility listed in paragraph (a) of this section. A hazardous waste treatment, storage, and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.
40 CFR 61, §61.342(a)	(a) An owner or operator of a facility at which the total annual benzene quantity from facility waste is less than 10 megagrams per year (Mg/yr) (11 ton/yr) shall be exempt from the requirements of paragraphs (b) and (c) of this section. The total annual benzene quantity from facility waste is the sum of the annual benzene quantity for each waste stream at the facility that has a flow-weighted annual average water content greater than 10 percent or that is mixed with water, or other wastes, at any time and the mixture has an annual average water content greater than 10 percent. The benzene quantity in a waste stream is to be counted only once without multiple counting if other waste streams are mixed with or generated from the original waste stream. Other specific requirements for calculating the total annual benzene waste quantity are as follows:
40 CFR 61, §61.342(a)(1)	(1) Wastes that are exempted from control under §§61.342(c)(2) and 61.342(c)(3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.
40 CFR 61, §61.342(a)(2)	(2) The benzene in a material subject to this subpart that is sold is included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10 percent.
40 CFR 61, §61.342(a)(3)	(3) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not included in the calculation of total annual benzene quantity for that facility. If the facility's total annual benzene quantity is 10 Mg/yr (11 ton/yr) or more, wastes generated by remediation activities are subject to the requirements of paragraphs (c) through (h) of this section. If the facility is managing remediation waste generated offsite, the benzene in this waste shall be included in the calculation of total annual benzene quantity in facility waste, if the waste streams have an annual average water content greater than 10 percent, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10 percent.

40 CFR 61, §61.342(a)(4)	(4) The total annual benzene quantity is determined based upon the quantity of benzene in the waste before any waste treatment occurs to remove the benzene except as specified in §61.355(c)(1)(i) (A) through (C).
40 CFR 61, §61.342(b)	(b) Each owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of this section shall be in compliance with the requirements of paragraphs (c) through (h) of this section no later than 90 days following the effective date, unless a waiver of compliance has been obtained under §61.11, or by the initial startup for a new source with an initial startup after the effective date.
40 CFR 61, §61.342(c)	(c) Each owner or operator of a facility at which the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr) as determined in paragraph (a) of this section shall manage and treat the facility waste as follows:
40 CFR 61, §61.342(c)(1)	(1) For each waste stream that contains benzene, including (but not limited to) organic waste streams that contain less than 10 percent water and aqueous waste streams, even if the wastes are not discharged to an individual drain system, the owner or operator shall:
40 CFR 61, §61.342(c)(1)	(i) Remove or destroy the benzene contained in the waste using a treatment process or wastewater treatment system that complies with the standards specified in §61.348 of this subpart.
40 CFR 61, §61.342(c)(1)	(ii) Comply with the standards specified in §§61.343 through 61.347 of this subpart for each waste management unit that receives or manages the waste stream prior to and during treatment of the waste stream in accordance with paragraph (c)(1)(i) of this section.
40 CFR 61, §61.342(c)(1)	(iii) Each waste management unit used to manage or treat waste streams that will be recycled to a process shall comply with the standards specified in §§61.343 through 61.347. Once the waste stream is recycled to a process, including to a tank used for the storage of production process feed, product, or product intermediates, unless this tank is used primarily for the storage of wastes, the material is no longer subject to paragraph (c) of this section.
40 CFR 61, §61.342(g)	(g) Compliance with this subpart will be determined by review of facility records and results from tests and inspections using methods and procedures specified in §61.355 of this subpart.
40 CFR 61, §61.343(a)	(a) Except as provided in paragraph (b) of this section and in §61.351, the owner or operator must meet the standards in paragraph (a)(1) or (2) of this section for each tank in which the waste stream is placed in accordance with §61.342 (c)(1)(ii). The standards in this section apply to the treatment and storage of the waste stream in a tank, including dewatering.
40 CFR 61, §61.343(a)(1)	(1) The owner or operator shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

40 CFR 61, §61.343(a)(1)(i)	(i) The fixed-roof shall meet the following requirements:
40 CFR 61, §61.343(a)(1)(i)	(A) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in §61.355(h) of this subpart.
40 CFR 61, §61.343(a)(1)(i)	(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.
40 CFR 61, §61.343(a)(1)(i)	(C) If the cover and closed-vent system operate such that the tank is maintained at a pressure less than atmospheric pressure, then paragraph (a)(1)(i)(B) of this section does not apply to any opening that meets all of the following conditions:
40 CFR 61, §61.343(a)(1)(i)(C)	(1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
40 CFR 61, §61.343(a)(1)(i)(C)	(2) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in §61.355(h); and
40 CFR 61, §61.343(a)(1)(i)(C)	(3) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.
40 CFR 61, §61.343(a)(1)(ii)	(ii) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §61.349 of this subpart.
40 CFR 61, §61.343(a)(2)	(2) The owner or operator must install, operate, and maintain an enclosure and closed-vent system that routes all organic vapors vented from the tank, located inside the enclosure, to a control device in accordance with the requirements specified in paragraph (e) of this section.
40 CFR 61, §61.343(c)	(c) Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.
40 CFR 61, §61.343(d)	(d) Except as provided in §61.350 of this subpart, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 45 calendar days after identification.
40 CFR 61, §61.348(a)	(a) Except as provided in paragraph (a)(5) of this section, the owner or operator shall treat the waste stream in accordance with the following requirements:
40 CFR 61, §61.348(a)(1)	(1) The owner or operator shall design, install, operate, and maintain a treatment process that either:
40 CFR 61, §61.348(a)(1)	(iii) Destroys benzene in the waste stream by incinerating the waste in a combustion unit that achieves a destruction efficiency of 99 percent or greater for benzene.

40 CFR 61, §61.348(c)	(c) The owner and operator shall demonstrate that each treatment process or wastewater treatment system unit, except as provided in paragraph (d) of this section, achieves the appropriate conditions specified in paragraphs (a) or (b) of this section in accordance with the following requirements:
40 CFR 61, §61.348(c)(1)	(1) Engineering calculations in accordance with requirements specified in §61.356(e) of this subpart; or
40 CFR 61, §61.348(c)(2)	(2) Performance tests conducted using the test methods and procedures that meet the requirements specified in §61.355 of this subpart.
40 CFR 61, §61.348(e)	(e) Except as specified in paragraph (e)(3) of this section, if the treatment process or wastewater treatment system unit has any openings (e.g., access doors, hatches, etc.), all such openings shall be sealed (e.g., gasketed, latched, etc.) and kept closed at all times when waste is being treated, except during inspection and maintenance.
40 CFR 61, §61.348(e)(1)	(1) Each seal, access door, and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.
40 CFR 61, §61.348(e)(2)	(2) Except as provided in §61.350 of this subpart, when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.
40 CFR 61, §61.348(e)(3)	(3) If the cover and closed-vent system operate such that the treatment process and wastewater treatment system unit are maintained at a pressure less than atmospheric pressure, the owner or operator may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:
40 CFR 61, §61.348(e)(3)(i)	(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
40 CFR 61, §61.348(e)(3)(ii)	(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in §61.355(h); and
40 CFR 61, §61.348(e)(3)(iii)	(iii) The pressure is monitored continuously to ensure that the pressure in the treatment process and wastewater treatment system unit remain below atmospheric pressure.
40 CFR 61, §61.348(g)	(g) The owner or operator of a treatment process or wastewater treatment system unit that is used to comply with the provisions of this section shall monitor the unit in accordance with the applicable requirements in §61.354 of this subpart.
40 CFR 61, §61.349(a)	(a) For each closed-vent system and control device used to comply with standards in accordance with §§61.343 through 61.348 of this subpart, the owner or operator shall properly design, install, operate, and maintain the closed-vent system and control device in accordance with the following requirements:
40 CFR 61, §61.349(a)(1)	(1) The closed-vent system shall:

40 CFR 61, §61.349(a)(1)	(i) Be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in §61.355(h) of this subpart.
40 CFR 61, §61.349(a)(1)(ii)	(ii) Vent systems that contain any bypass line that could divert the vent stream away from a control device used to comply with the provisions of this subpart shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every 15 minutes, except as provided in paragraph (a)(1)(ii)(B) of this section.
40 CFR 61, §61.349(a)(1)(ii)	(A) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.
40 CFR 61, §61.349(a)(1)(ii)	(B) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.
40 CFR 61, §61.349(a)(1)	(iii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
40 CFR 61, §61.349(a)(1)	(iv) For each closed-vent system complying with paragraph (a) of this section, one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.
40 CFR 61, §61.349(a)(2)	(2) The control device shall be designed and operated in accordance with the following conditions:
40 CFR 61, §61.349(a)(2)(i)	(i) An enclosed combustion device (e.g., a vapor incinerator, boiler, or process heater) shall meet one of the following conditions:
40 CFR 61, §61.349(a)(2)(i)	(A) Reduce the organic emissions vented to it by 95 weight percent or greater;
40 CFR 61, §61.349(a)(2)(i)	(B) Achieve a total organic compound concentration of 20 ppmv (as the sum of the concentrations for individual compounds using Method 18) on a dry basis corrected to 3 percent oxygen; or
40 CFR 61, §61.349(a)(2)(i)	(C) Provide a minimum residence time of 0.5 seconds at a minimum temperature of 760 °C (1,400 °F). If a boiler or process heater issued as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater.
40 CFR 61, §61.349(a)(2)	(ii) A vapor recovery system (e.g., a carbon adsorption system or a condenser) shall recover or control the organic emissions vented to it with an efficiency of 95 weight percent or greater, or shall recover or control the benzene emissions vented to it with an efficiency of 98 weight percent or greater.

40 CFR 61, §61.349(b)	(b) Each closed-vent system and control device used to comply with this subpart shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.
40 CFR 61, §61.349(c)	(c) An owner and operator shall demonstrate that each control device, except for a flare, achieves the appropriate conditions specified in paragraph (a)(2) of this section by using one of the following methods:
40 CFR 61, §61.349(c)	(1) Engineering calculations in accordance with requirements specified in §61.356(f) of this subpart; or
40 CFR 61, §61.349(c)	(2) Performance tests conducted using the test methods and procedures that meet the requirements specified in §61.355 of this subpart.
40 CFR 61, §61.349(f)	(f) Each closed-vent system and control device shall be visually inspected initially and quarterly thereafter. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.
40 CFR 61, §61.349(g)	(g) Except as provided in §61.350 of this subpart, if visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than 5 calendar days after detection. Repair shall be completed no later than 15 calendar days after the emissions are detected or the visible defect is observed.
40 CFR 61, §61.349(h)	(h) The owner or operator of a control device that is used to comply with the provisions of this section shall monitor the control device in accordance with §61.354(c) of this subpart.
40 CFR 61, §61.350(a)	(a) Delay of repair of facilities or units that are subject to the provisions of this subpart will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.
40 CFR 61, §61.350(b)	(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.
40 CFR 61, §61.354(a)	(a) Except for a treatment process or waste stream complying with §61.348(d), the owner or operator shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following monitoring procedures:
40 CFR 61, §61.354(a)(1)	(1) Measure the benzene concentration of the waste stream exiting the treatment process complying with §61.348(a)(1)(i) at least once per month by collecting and analyzing one or more samples using the procedures specified in §61.355(c)(3).

40 CFR 61, §61.354(a)(2)	(2) Install, calibrate, operate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter (or parameters) for the treatment process or wastewater treatment system unit that indicates proper system operation. The owner or operator shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the unit is operating properly.
40 CFR 61, §61.354(c)	(c) An owner or operator subject to the requirements in §61.349 of this subpart shall install, calibrate, maintain, and operate according to the manufacturer's specifications a device to continuously monitor the control device operation as specified in the following paragraphs, unless alternative monitoring procedures or requirements are approved for that facility by the Administrator. The owner or operator shall inspect at least once each operating day the data recorded by the monitoring equipment (e.g., temperature monitor or flow indicator) to ensure that the control device is operating properly.
40 CFR 61, §61.354(c)(1)	(1) For a thermal vapor incinerator, a temperature monitoring device equipped with a continuous recorder. The device shall have an accuracy of ±1 percent of the temperature being monitored in °C or ±0.5 °C, whichever is greater. The temperature sensor shall be installed at a representative location in the combustion chamber.
40 CFR 61, §61.354(d)	(d) For a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, an owner or operator may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.
40 CFR 61, §61.354(f)	(f) Owners or operators using a closed-vent system that contains any bypass line that could divert a vent stream from a control device used to comply with the provisions of this subpart shall do the following:
40 CFR 61, §61.354(f)(1)	(1) Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or closure mechanism required under §61.349(a)(1)(ii) to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.

40 CFR 61, §61.354(f)(2)	(2) Visually inspect the readings from each flow monitoring device required by §61.349(a)(1)(ii) at least once each operating day to check that vapors are being routed to the control device as required.
40 CFR 61, §61.355(a)	(a) An owner or operator shall determine the total annual benzene quantity from facility waste by the following procedure:
40 CFR 61, §61.355(a)(1)	(1) For each waste stream subject to this subpart having a flow-weighted annual average water content greater than 10 percent water, on a volume basis as total water, or is mixed with water or other wastes at any time and the resulting mixture has an annual average water content greater than 10 percent as specified in §61.342(a), the owner or operator shall:
40 CFR 61, §61.355(a)(1)(i)	(i) Determine the annual waste quantity for each waste stream using the procedures specified in paragraph (b) of this section.
40 CFR 61, §61.355(a)(1)(ii)	(ii) Determine the flow-weighted annual average benzene concentration for each waste stream using the procedures specified in paragraph (c) of this section.
40 CFR 61, §61.355(a)(1)(iii)	(iii) Calculate the annual benzene quantity for each waste stream by multiplying the annual waste quantity of the waste stream times the flow-weighted annual average benzene concentration.
40 CFR 61, §61.355(a)(2)	(2) Total annual benzene quantity from facility waste is calculated by adding together the annual benzene quantity for each waste stream generated during the year and the annual benzene quantity for each process unit turnaround waste annualized according to paragraph (b)(4) of this section.
40 CFR 61, §61.355(a)(3)	(3) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the owner or operator shall comply with the requirements of §61.342 (c), (d), or (e).
40 CFR 61, §61.355(a)(4)	(4) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:
40 CFR 61, §61.355(a)(4)(i)	(i) Comply with the recordkeeping requirements of §61.356 and reporting requirements of §61.357 of this subpart; and
40 CFR 61, §61.355(a)(4)(ii)	(ii) Repeat the determination of total annual benzene quantity from facility waste at least once per year and whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more.
40 CFR 61, §61.355(a)(5)	(5) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall:
40 CFR 61, §61.355(a)(5)(i)	(i) Comply with the recordkeeping requirements of §61.356 and reporting requirements of §61.357 of this subpart; and
40 CFR 61, §61.355(a)(5)(ii)	(ii) Repeat the determination of total annual benzene quantity from facility waste whenever there is a change in the process generating the waste that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.

40 CFR 61, §61.355(a)(6)	(6) The benzene quantity in a waste stream that is generated less than one time per year, except as provided for process unit turnaround waste in paragraph (b)(4) of this section, shall be included in the determination of total annual benzene quantity from facility waste for the year in which the waste is generated unless the waste stream is otherwise excluded from the determination of total annual benzene quantity from facility waste in accordance with paragraphs (a) through (c) of this section. The benzene quantity in this waste stream shall not be annualized or averaged over the time interval between the activities that resulted in generation of the waste, for purposes of determining the total annual benzene quantity from facility waste.
40 CFR 61, §61.355(b)	(b) For purposes of the calculation required by paragraph (a) of this section, an owner or operator shall determine the annual waste quantity at the point of waste generation, unless otherwise provided in paragraphs (b)(1), (2), (3), and (4) of this section, by one of the methods given in paragraphs (b) (5) through (7) of this section.
40 CFR 61, §61.355(b)(3)	(3) The determination of annual waste quantity for wastes that are received at hazardous waste treatment, storage, or disposal facilities from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
40 CFR 61, §61.355(b)(5)	(5) Select the highest annual quantity of waste managed from historical records representing the most recent 5 years of operation or, if the facility has been in service for less than 5 years but at least 1 year, from historical records representing the total operating life of the facility;
40 CFR 61, §61.355(b)(6)	(6) Use the maximum design capacity of the waste management unit; or
40 CFR 61, §61.355(b)(7)	(7) Use measurements that are representative of maximum waste generation rates.
40 CFR 61, §61.355(c)	(c) For the purposes of the calculation required by §§61.355(a) of this subpart, an owner or operator shall determine the flow-weighted annual average benzene concentration in a manner that meets the requirements given in paragraph (c)(1) of this section using either of the methods given in paragraphs (c)(2) and (c)(3) of this section.
40 CFR 61, §61.355(c)(1)	(1) The determination of flow-weighted annual average benzene concentration shall meet all of the following criteria:
40 CFR 61, §61.355(c)(1)(i)	(i) The determination shall be made at the point of waste generation except for the specific cases given in paragraphs (c)(1)(i)(A) through (D) of this section.
40 CFR 61, §61.355(c)(1)(i)	(C) The determination for wastes that are received from offsite shall be made at the point where the waste enters the hazardous waste treatment, storage, or disposal facility.
40 CFR 61, §61.355(c)(1)(ii)	(ii) Volatilization of the benzene by exposure to air shall not be used in the determination to reduce the benzene concentration.
40 CFR 61, §61.355(c)(1)(iii)	(iii) Mixing or diluting the waste stream with other wastes or other materials shall not be used in the determination-to reduce the benzene

	concentration.
40 CFR 61, §61.355(c)(1)(iv)	(iv) The determination shall be made prior to any treatment of the waste that removes benzene, except as specified in paragraphs (c)(1)(i)(A) through (D) of this section.
40 CFR 61, §61.355(c)(1)(v)	(v) For wastes with multiple phases, the determination shall provide the weighted-average benzene concentration based on the benzene concentration in each phase of the waste and the relative proportion of the phases.
40 CFR 61, §61.355(c)(2)	(2) Knowledge of the waste. The owner or operator shall provide sufficient information to document the flow-weighted annual average benzene concentration of each waste stream. Examples of information that could constitute knowledge include material balances, records of chemicals purchases, or previous test results provided the results are still relevant to the current waste stream conditions. If test data are used, then the owner or operator shall provide documentation describing the testing protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the flow-weighted annual average benzene concentration for the waste stream. When an owner or operator and the Administrator do not agree on determinations of the flow-weighted annual average benzene concentration based on knowledge of the waste, the procedures under paragraph (c)(3) of this section shall be used to resolve the disagreement.
40 CFR 61, §61.355(c)(3)	(3) Measurements of the benzene concentration in the waste stream in accordance with the following procedures:
40 CFR 61, §61.355(c)(3)(i)	(i) Collect a minimum of three representative samples from each waste stream. Where feasible, samples shall be taken from an enclosed pipe prior to the waste being exposed to the atmosphere.
40 CFR 61, §61.355(c)(3)(iii)	(iii) When sampling from an enclosed pipe is not feasible, a minimum of three representative samples shall be collected in a manner to minimize exposure of the sample to the atmosphere and loss of benzene prior to sampling.
40 CFR 61, §61.355(c)(3)(iv)	(iv) Each waste sample shall be analyzed using one of the following test methods for determining the benzene concentration in a waste stream:
40 CFR 61, §61.355(c)(3)(iv)	(A) Method 8020, Aromatic Volatile Organics, in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of this part);
40 CFR 61, §61.355(c)(3)(iv)	(B) Method 8021, Volatile Organic Compounds in Water by Purge and Trap Capillary Column Gas Chromatography with Photoionization and Electrolytic Conductivity Detectors in Series in “Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,” EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of this part);

40 CFR 61, §61.355(c)(3)(iv)	(C) Method 8240, Gas Chromatography/Mass Spectrometry for Volatile Organics in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of this part);
40 CFR 61, §61.355(c)(3)(iv)	(D) Method 8260, Gas Chromatography/Mass Spectrometry for Volatile Organics: Capillary Column Technique in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication No. SW-846 (incorporation by reference as specified in §61.18 of this part);
40 CFR 61, §61.355(c)(3)(iv)	(E) Method 602, Purgeable Aromatics, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA methods; or
40 CFR 61, §61.355(c)(3)(iv)	(F) Method 624, Purgeables, as described in 40 CFR part 136, appendix A, Test Procedures for Analysis of Organic Pollutants, for wastewaters for which this is an approved EPA method.
40 CFR 61, §61.355(c)(3)(v)	(v) The flow-weighted annual average benzene concentration shall be calculated by averaging the results of the sample analyses as follows:
40 CFR 61, §61.355(f)	(f) An owner or operator using performance tests to demonstrate compliance of a treatment process with §61.348(a)(1)(iii) of this subpart shall determine the benzene destruction efficiency for the combustion unit by the following procedure:
40 CFR 61, §61.355(f)(1)	(1) The test shall be conducted under conditions that exist when the combustion unit is operating at the highest inlet waste stream flow rate and benzene content expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information necessary to document the operating conditions during the test.
40 CFR 61, §61.355(f)(2)	(2) All testing equipment shall be prepared and installed as specified in the appropriate test methods.
40 CFR 61, §61.355(f)(3)	(3) The mass flow rate of benzene entering the combustion unit shall be determined by computing the product of the flow rate of the waste stream entering the combustion unit, as determined by the inlet flow meter, and the benzene concentration of the waste stream, as determined using the sampling procedures in paragraph (c)(2) or (c)(3) of this section. Three grab samples of the waste shall be taken at equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs conducted over a 3-hour period. The mass flow rate of benzene into the combustion unit is calculated as follows:
40 CFR 61, §61.355(f)(4)	(4) The mass flow rate of benzene exiting the combustion unit exhaust stack shall be determined as follows:
40 CFR 61, §61.355(f)(4)(i)	(i) The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected and be the same time period at which the mass flow rate of benzene entering the treatment process is determined. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample and each 1-

	hour period shall correspond to the periods when the waste feed is sampled.
40 CFR 61, §61.355(f)(4)(ii)	(ii) A run shall consist of a 1-hour period during the test. For each run:
40 CFR 61, §61.355(f)(4)(ii)	(A) The reading from each measurement shall be recorded;
40 CFR 61, §61.355(f)(4)(ii)	(B) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate.
40 CFR 61, §61.355(f)(4)(ii)	(C) The average benzene concentration in the exhaust downstream of the combustion unit shall be determined using Method 18 from appendix A of 40 CFR part 60.
40 CFR 61, §61.355(f)(4)(iii)	(iii) The mass of benzene emitted during each run shall be calculated as follows:
40 CFR 61, §61.355(f)(4)(iv)	(iv) The benzene mass emission rate in the exhaust shall be calculated as follows:
40 CFR 61, §61.355(h)	(h) An owner or operator shall test equipment for compliance with no detectable emissions as required in §§61.343 through 61.347, and §61.349 of this subpart in accordance with the following requirements:
40 CFR 61, §61.355(h)(1)	(1) Monitoring shall comply with Method 21 from appendix A of 40 CFR part 60.
40 CFR 61, §61.355(h)(2)	(2) The detection instrument shall meet the performance criteria of Method 21.
40 CFR 61, §61.355(h)(3)	(3) The instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21.
40 CFR 61, §61.355(h)(4)	(4) Calibration gases shall be:
40 CFR 61, §61.355(h)(4)(i)	(i) Zero air (less than 10 ppm of hydrocarbon in air); and
40 CFR 61, §61.355(h)(4)(ii)	(ii) A mixture of methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.
40 CFR 61, §61.355(h)(5)	(5) The background level shall be determined as set forth in Method 21.
40 CFR 61, §61.355(h)(6)	(6) The instrument probe shall be traversed around all potential leak interfaces as close as possible to the interface as described in Method 21.
40 CFR 61, §61.355(h)(7)	(7) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared to 500 ppm for determining compliance.
40 CFR 61, §61.355(i)	(i) An owner or operator using a performance test to demonstrate compliance of a control device with either the organic reduction efficiency requirement or the benzene reduction efficiency requirement specified under §61.349(a)(2) shall use the following procedures:

40 CFR 61, §61.355(i)(1)	(1) The test shall be conducted under conditions that exist when the waste management unit vented to the control device is operating at the highest load or capacity level expected to occur. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a test. The owner or operator shall record all process information necessary to document the operating conditions during the test.
40 CFR 61, §61.355(i)(2)	(2) Sampling sites shall be selected using Method 1 or 1A from appendix A of 40 CFR part 60, as appropriate.
40 CFR 61, §61.355(i)(3)	(3) The mass flow rate of either the organics or benzene entering and exiting the control device shall be determined as follows:
40 CFR 61, §61.355(i)(3)(i)	(i) The time period for the test shall not be less than 3 hours during which at least 3 stack gas samples are collected. Samples of the vent stream entering and exiting the control device shall be collected during the same time period. Each sample shall be collected over a 1-hour period (e.g., in a tedlar bag) to represent a time-integrated composite sample.
40 CFR 61, §61.355(i)(3)(ii)	(ii) A run shall consist of a 1-hour period during the test. For each run:
40 CFR 61, §61.355(i)(3)(ii)	(A) The reading from each measurement shall be recorded;
40 CFR 61, §61.355(i)(3)(ii)	(B) The volume exhausted shall be determined using Method 2, 2A, 2C, or 2D from appendix A of 40 CFR part 60, as appropriate;
40 CFR 61, §61.355(i)(3)(ii)	(C) The organic concentration or the benzene concentration, as appropriate, in the vent stream entering and exiting the control shall be determined using Method 18 from appendix A of 40 CFR part 60.
40 CFR 61, §61.355(i)(3)(iii)	(iii) The mass of organics or benzene entering and exiting the control device during each run shall be calculated as follows:
40 CFR 61, §61.355(i)(3)(iv)	(iv) The mass flow rate of organics or benzene entering and exiting the control device shall be calculated as follows:
40 CFR 61, §61.355(i)(4)	(4) The organic reduction efficiency or the benzene reduction efficiency for the control device shall be calculated as follows:
40 CFR 61, §61.356(a)	(a) Each owner or operator of a facility subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section. Each record shall be maintained in a readily accessible location at the facility site for a period not less than two years from the date the information is recorded unless otherwise specified.
40 CFR 61, §61.356(b)	(b) Each owner or operator shall maintain records that identify each waste stream at the facility subject to this subpart, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with this subpart. In addition the owner or operator shall maintain the following records:

40 CFR 61, §61.356(b)(1)	(1) For each waste stream not controlled for benzene emissions in accordance with this subpart, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
40 CFR 61, §61.356(b)(5)	(5) For each facility where the annual waste quantity for process unit turnaround waste is determined in accordance with §61.355(b)(5), the records shall include all test results, measurements, calculations, and other documentation used to determine the following information: identification of each process unit at the facility that undergoes turnarounds, the date of the most recent turnaround for each process unit, identification of each process unit turnaround waste, the water content of each process unit turnaround waste, the annual waste quantity determined in accordance with §61.355(b)(5), the range of benzene concentrations in the waste, the annual average flow-weighted benzene concentration of the waste, and the annual benzene quantity calculated in accordance with §61.355(a)(1)(iii) of this section.
40 CFR 61, §61.356(c)	(c) An owner or operator transferring waste off-site to another facility for treatment in accordance with §61.342(f) shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.
40 CFR 61, §61.356(d)	(d) An owner or operator using control equipment in accordance with §§61.343 through 61.347 shall maintain engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment. If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.
40 CFR 61, §61.356(e)	(e) An owner or operator using a treatment process or wastewater treatment system unit in accordance with §61.348 of this subpart shall maintain the following records. The documentation shall be retained for the life of the unit.
40 CFR 61, §61.356(e)(1)	(1) A statement signed and dated by the owner or operator certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.
40 CFR 61, §61.356(e)(2)	(2) If engineering calculations are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain the complete design analysis for the unit. The design analysis shall include for example the following information: Design specifications, drawings, schematics, piping and instrumentation diagrams,

	and other documentation necessary to demonstrate the unit performance.
40 CFR 61, §61.356(e)(3)	(3) If performance tests are used to determine treatment process or wastewater treatment system unit performance, then the owner or operator shall maintain all test information necessary to demonstrate the unit performance.
40 CFR 61, §61.356(e)(3)(i)	(i) A description of the unit including the following information: type of treatment process; manufacturer name and model number; and for each waste stream entering and exiting the unit, the waste stream type (e.g., process wastewater, sludge, slurry, etc.), and the design flow rate and benzene content.
40 CFR 61, §61.356(e)(3)(ii)	(ii) Documentation describing the test protocol and the means by which sampling variability and analytical variability were accounted for in the determination of the unit performance. The description of the test protocol shall include the following information: sampling locations, sampling method, sampling frequency, and analytical procedures used for sample analysis.
40 CFR 61, §61.356(e)(3)(iii)	(iii) Records of unit operating conditions during each test run including all key process parameters.
40 CFR 61, §61.356(e)(3)(iv)	(iv) All test results.
40 CFR 61, §61.356(e)(4)	(4) If a control device is used, then the owner or operator shall maintain the control device records required by paragraph (f) of this section.
40 CFR 61, §61.356(f)	(f) An owner or operator using a closed-vent system and control device in accordance with §61.349 of this subpart shall maintain the following records. The documentation shall be retained for the life of the control device.
40 CFR 61, §61.356(f)(1)	(1) A statement signed and dated by the owner or operator certifying that the closed-vent system and control device is designed to operate at the documented performance level when the waste management unit vented to the control device is or would be operating at the highest load or capacity expected to occur.
40 CFR 61, §61.356(f)(2)	(2) If engineering calculations are used to determine control device performance in accordance with §61.349(c), then a design analysis for the control device that includes for example:
40 CFR 61, §61.356(f)(2)(i)	(i) Specifications, drawings, schematics, and piping and instrumentation diagrams prepared by the owner or operator, or the control device manufacturer or vendor that describe the control device design based on acceptable engineering texts. The design analysis shall address the following vent stream characteristics and control device operating parameters:

40 CFR 61, §61.356(f)(2)(i)	(A) For a thermal vapor incinerator, the design analysis shall consider the vent stream composition, constituent concentrations, and flow rate. The design analysis shall also establish the design minimum and average temperature in the combustion zone and the combustion zone residence time.
40 CFR 61, §61.356(f)(2)(i)	(G) For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device, such as a carbon canister, the design analysis shall consider the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.
40 CFR 61, §61.356(f)(3)	(3) If performance tests are used to determine control device performance in accordance with §61.349(c) of this subpart:
40 CFR 61, §61.356(f)(3)(i)	(i) A description of how it is determined that the test is conducted when the waste management unit or treatment process is operating at the highest load or capacity level. This description shall include the estimated or design flow rate and organic content of each vent stream and definition of the acceptable operating ranges of key process and control parameters during the test program.
40 CFR 61, §61.356(f)(3)(ii)	(ii) A description of the control device including the type of control device, control device manufacturer's name and model number, control device dimensions, capacity, and construction materials.
40 CFR 61, §61.356(f)(3)(iii)	(iii) A detailed description of sampling and monitoring procedures, including sampling and monitoring locations in the system, the equipment to be used, sampling and monitoring frequency, and planned analytical procedures for sample analysis.
40 CFR 61, §61.356(f)(3)(iv)	(iv) All test results.
40 CFR 61, §61.356(g)	(g) An owner or operator shall maintain a record for each visual inspection required by §§61.343 through 61.347 of this subpart that identifies a problem (such as a broken seal, gap or other problem) which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

40 CFR 61, §61.356(h)	(h) An owner or operator shall maintain a record for each test of no detectable emissions required by §§61.343 through 61.347 and §61.349 of this subpart. The record shall include the following information: date the test is performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.
40 CFR 61, §61.356(i)	(i) For each treatment process and wastewater treatment system unit operated to comply with §61.348, the owner or operator shall maintain documentation that includes the following information regarding the unit operation:
40 CFR 61, §61.356(i)(1)	(1) Dates of startup and shutdown of the unit.
40 CFR 61, §61.356(i)(2)	(2) If measurements of waste stream benzene concentration are performed in accordance with §61.354(a)(1) of this subpart, the owner or operator shall maintain records that include date each test is performed and all test results.
40 CFR 61, §61.356(i)(3)	(3) If a process parameter is continuously monitored in accordance with §61.354(a)(2) of this subpart, the owner or operator shall maintain records that include a description of the operating parameter (or parameters) to be monitored to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the unit.
40 CFR 61, §61.356(i)(4)	(4) If measurements of waste stream benzene concentration are performed in accordance with §61.354(b), the owner or operator shall maintain records that include the date each test is performed and all test results.
40 CFR 61, §61.356(i)(5)	(5) Periods when the unit is not operated as designed.
40 CFR 61, §61.356(j)	(j) For each control device, the owner or operator shall maintain documentation that includes the following information regarding the control device operation:
40 CFR 61, §61.356(j)(1)	(1) Dates of startup and shutdown of the closed-vent system and control device.
40 CFR 61, §61.356(j)(2)	(2) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter (or parameters). This documentation shall be kept for the life of the control device.
40 CFR 61, §61.356(j)(3)	(3) Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

40 CFR 61, §61.356(j)(3)(i)	(i) Any valve car-seal or closure mechanism required under §61.349(a)(1)(ii) is broken or the by-pass line valve position has changed.
40 CFR 61, §61.356(j)(3)(ii)	(ii) The flow monitoring devices required under §61.349(a)(1)(ii) indicate that vapors are not routed to the control device as required.
40 CFR 61, §61.356(j)(4)	(4) If a thermal vapor incinerator is used, then the owner or operator shall maintain continuous records of the temperature of the gas stream in the combustion zone of the incinerator and records of all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28 °C (50 °F) below the design combustion zone temperature.
40 CFR 61, §61.356(j)(9)	(9) If a carbon adsorber is used, then the owner or operator shall maintain records from the monitoring device of the concentration of organics or the concentration of benzene in the control device outlet gas stream. If the concentration of organics or the concentration of benzene in the control device outlet gas stream is monitored, then the owner or operator shall record all 3-hour periods of operation during which the concentration of organics or the concentration of benzene in the exhaust stream is more than 20 percent greater than the design value. If the carbon bed regeneration interval is monitored, then the owner or operator shall record each occurrence when the vent stream continues to flow through the control device beyond the predetermined carbon bed regeneration time.
40 CFR 61, §61.356(j)(10)	(10) If a carbon adsorber that is not regenerated directly on site in the control device is used, then the owner or operator shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.
40 CFR 61, §61.357(a)	(a) Each owner or operator of a chemical plant, petroleum refinery, coke by-product recovery plant, and any facility managing wastes from these industries shall submit to the Administrator within 90 days after January 7, 1993, or by the initial startup for a new source with an initial startup after the effective date, a report that summarizes the regulatory status of each waste stream subject to §61.342 and is determined by the procedures specified in §61.355(c) to contain benzene. Each owner or operator subject to this subpart who has no benzene onsite in wastes, products, by-products, or intermediates shall submit an initial report that is a statement to this effect. For all other owners or operators subject to this subpart, the report shall include the following information:
40 CFR 61, §61.357(a)(1)	(1) Total annual benzene quantity from facility waste determined in accordance with §61.355(a) of this subpart.
40 CFR 61, §61.357(a)(2)	(2) A table identifying each waste stream and whether or not the waste stream will be controlled for benzene emissions in accordance with the requirements of this subpart.
40 CFR 61, §61.357(a)(3)	(3) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of this subpart the following information shall be added to the table:

40 CFR 61, §61.357(a)(3)(i)	(i) Whether or not the water content of the waste stream is greater than 10 percent;
40 CFR 61, §61.357(a)(3)(ii)	(ii) Whether or not the waste stream is a process wastewater stream, product tank drawdown, or landfill leachate;
40 CFR 61, §61.357(a)(3)(iii)	(iii) Annual waste quantity for the waste stream;
40 CFR 61, §61.357(a)(3)(iv)	(iv) Range of benzene concentrations for the waste stream;
40 CFR 61, §61.357(a)(3)(v)	(v) Annual average flow-weighted benzene concentration for the waste stream; and
40 CFR 61, §61.357(a)(3)(vi)	(vi) Annual benzene quantity for the waste stream.
40 CFR 61, §61.357(a)(4)	(4) The information required in paragraphs (a) (1), (2), and (3) of this section should represent the waste stream characteristics based on current configuration and operating conditions. An owner or operator only needs to list in the report those waste streams that contact materials containing benzene. The report does not need to include a description of the controls to be installed to comply with the standard or other information required in §61.10(a).
40 CFR 61, §61.357(b)	(b) If the total annual benzene quantity from facility waste is less than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 1 Mg/yr (1.1 ton/yr) or more.
40 CFR 61, §61.357(c)	(c) If the total annual benzene quantity from facility waste is less than 10 Mg/yr (11 ton/yr) but is equal to or greater than 1 Mg/yr (1.1 ton/yr), then the owner or operator shall submit to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. The report shall be submitted annually and whenever there is a change in the process generating the waste stream that could cause the total annual benzene quantity from facility waste to increase to 10 Mg/yr (11 ton/yr) or more. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the owner or operator may submit a statement to that effect.
40 CFR 61, §61.357(d)	(d) If the total annual benzene quantity from facility waste is equal to or greater than 10 Mg/yr (11 ton/yr), then the owner or operator shall submit to the Administrator the following reports:
40 CFR 61, §61.357(d)(1)	(1) Within 90 days after January 7, 1993, unless a waiver of compliance under §61.11 of this part is granted, or by the date of initial startup for a new source with an initial startup after the effective date, a certification that the equipment necessary to comply with these standards has been installed and that the required initial inspections or tests have been carried out in

	accordance with this subpart. If a waiver of compliance is granted under §61.11, the certification of equipment necessary to comply with these standards shall be submitted by the date the waiver of compliance expires.
40 CFR 61, §61.357(d)(2)	(2) Beginning on the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that updates the information listed in paragraphs (a)(1) through (a)(3) of this section. If the information in the annual report required by paragraphs (a)(1) through (a)(3) of this section is not changed in the following year, the owner or operator may submit a statement to that effect.
40 CFR 61, §61.357(d)(3)	(3) If an owner or operator elects to comply with the requirements of §61.342(c)(3)(ii), then the report required by paragraph (d)(2) of this section shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.
40 CFR 61, §61.357(d)(6)	(6) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of this subpart.
40 CFR 61, §61.357(d)(7)	(7) Beginning 3 months after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit a report quarterly to the Administrator that includes:
40 CFR 61, §61.357(d)(7)(i)	(i) If a treatment process or wastewater treatment system unit is monitored in accordance with §61.354(a)(1) of this subpart, then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.
40 CFR 61, §61.357(d)(7)(ii)	(ii) If a treatment process or wastewater treatment system unit is monitored in accordance with §61.354(a)(2) of this subpart, then each 3-hour period of operation during which the average value of the monitored parameter is outside the range of acceptable values or during which the unit is not operating as designed.
40 CFR 61, §61.357(d)(7)(iii)	(iii) If a treatment process or wastewater treatment system unit is monitored in accordance with §61.354(b), then each period of operation during which the flow-weighted annual average concentration of benzene in the monitored waste stream entering the unit is equal to or greater than 10 ppmw and/or the total annual benzene quantity is equal to or greater than 1.0 mg/yr.
40 CFR 61,	(iv) For a control device monitored in accordance with §61.354(c) of this

§61.357(d)(7)(iv)	subpart, each period of operation monitored during which any of the following conditions occur, as applicable to the control device:
40 CFR 61, §61.357(d)(7)(iv)	(A) Each 3-hour period of operation during which the average temperature of the gas stream in the combustion zone of a thermal vapor incinerator, as measured by the temperature monitoring device, is more than 28 °C (50 °F) below the design combustion zone temperature.
40 CFR 61, §61.357(d)(7)(iv)	(D) Each 3-hour period of operation during which the average concentration of organics or the average concentration of benzene in the exhaust gases from a carbon adsorber, condenser, or other vapor recovery system is more than 20 percent greater than the design concentration level of organics or benzene in the exhaust gas.
40 CFR 61, §61.357(d)(7)(iv)	(I) Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly on site in the control device is not replaced at the predetermined interval specified in §61.354(c) of this subpart.
40 CFR 61, §61.357(d)(8)	(8) Beginning one year after the date that the equipment necessary to comply with these standards has been certified in accordance with paragraph (d)(1) of this section, the owner or operator shall submit annually to the Administrator a report that summarizes all inspections required by §§61.342 through 61.354 during which detectable emissions are measured or a problem (such as a broken seal, gap or other problem) that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

51. These sources are considered affected sources under 40 CFR Part 63, Subpart DD and are subject, but not limited to, the conditions found in the following table. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart DD]

40 CFR part 63, Subpart DD	
40 CFR 63, §63.683(b)	(b) *Off-site material management units.* (1) For each off-site material management unit that is part of an affected source, the owner or operator must meet the requirements in either paragraph (b)(1)(i), (b)(1)(ii), or (b)(1)(iii) of this section except for those off-site material management units exempted under paragraph (b)(2) of this section.
40 CFR 63, §63.685(d)	(d) Owners and operators controlling air emissions from a tank using Tank Level 2 controls shall use one of the following tanks:
40 CFR 63, §63.685(d)(3)	(3) A tank vented through a closed-vent system to a control device in accordance with the requirements specified in paragraph (g) of this section;
40 CFR 63, §63.685(g)	(g) The owner or operator who controls tank air emissions by venting to a control device shall meet the requirements specified in paragraphs (g)(1) through (g)(3) of this section.
40 CFR 63, §63.685(g)(1)	(1) The tank shall be covered by a fixed roof and vented directly through a closed-vent system to a control device in accordance with the following requirements:
40 CFR 63,	(i) The fixed roof and its closure devices shall be designed to form a

§63.685(g)(1)	continuous barrier over the entire surface area of the liquid in the tank.
40 CFR 63, §63.685(g)(1)	(ii) Each opening in the fixed roof not vented to the control device shall be equipped with a closure device. If the pressure in the vapor headspace underneath the fixed roof is less than atmospheric pressure when the control device is operating, the closure devices shall be designed to operate such that when the closure device is secured in the closed position there are no visible cracks, holes, gaps, or other open spaces in the closure device or between the perimeter of the cover opening and the closure device. If the pressure in the vapor headspace underneath the fixed roof is equal to or greater than atmospheric pressure when the control device is operating, the closure device shall be designed to operate with no detectable organic emissions.
40 CFR 63, §63.685(g)(1)	(iii) The fixed roof and its closure devices shall be made of suitable materials that will minimize exposure of the off-site material to the atmosphere, to the extent practical, and will maintain the integrity of the equipment throughout its intended service life. Factors to be considered when selecting the materials for and designing the fixed roof and closure devices shall include: organic vapor permeability, the effects of any contact with the liquid and its vapor managed in the tank; the effects of outdoor exposure to wind, moisture, and sunlight; and the operating practices used for the tank on which the fixed roof is installed.
40 CFR 63, §63.685(g)(1)	(iv) The closed-vent system and control device shall be designed and operated in accordance with the requirements of §63.693 of this subpart.
40 CFR 63, §63.685(g)(2)	(2) Whenever an off-site material is in the tank, the fixed roof shall be installed with each closure device secured in the closed position and the vapor headspace underneath the fixed roof vented to the control device except as follows:
40 CFR 63, §63.685(g)(2)	(i) Venting to the control device is not required, and opening of closure devices or removal of the fixed roof is allowed at the following times:
40 CFR 63, §63.685(g)(2)(i)	(A) To provide access to the tank for performing routine inspection, maintenance, or other activities needed for normal operations. Examples of such activities include those times when a worker needs to open a port to sample liquid in the tank, or when a worker needs to open a hatch to maintain or repair equipment. Following completion of the activity, the owner or operator shall promptly secure the closure device in the closed position or reinstall the cover, as applicable, to the tank.
40 CFR 63, §63.685(g)(2)(i)	(B) To remove accumulated sludge or other residues from the bottom of the tank.
40 CFR 63, §63.685(g)(2)	(ii) Opening of a safety device, as defined in §63.681 of this subpart, is allowed at any time conditions require it to do so to avoid an unsafe condition.
40 CFR 63, §63.685(g)(3)	(3) The owner or operator shall inspect and monitor the air emission control equipment in accordance with the procedures specified in §63.695 of this subpart.

40 CFR 63, §63.688(a)	(a) The provisions of this section apply to the control of air emissions from containers for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.
40 CFR 63, §63.688(b)	(b) The owner or operator shall control air emissions from each container subject to this section in accordance with the following requirements, as applicable to the container, except when the special provisions for waste stabilization processes specified in paragraph (c) of this section apply to the container.
40 CFR 63, §63.688(b)(3)	(3) For a container having a design capacity greater than 0.46 m3 and the container is in light-material service as defined in §63.681 of this subpart, the owner or operator must control air emissions from the container in accordance with the requirements in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.
40 CFR 63, §63.688(b)(3)(i)	(i) The owner or operator controls air emissions from the container in accordance with the standards for Container Level 2 controls as specified in 40 CFR part 63, subpart PP-National Emission Standards for Containers.
40 CFR 63, §63.688(b)(3)(ii)	(ii) As an alternative to meeting the requirements in paragraph (b)(3)(i) of this section, an owner or operator may choose to control air emissions from the container in accordance with the standards for Container Level 3 controls as specified in 40 CFR part 63, subpart PP-National Emission Standards for Containers.
40 CFR 63, §63.689(a)	(a) The provisions of this section apply to the control of air emissions from transfer systems for which §63.683(b)(1)(i) of this subpart references the use of this section for such air emission control.
40 CFR 63, §63.689(c)	(c) For each transfer system that is subject to this section but is not an individual drain system, the owner or operator shall control air emissions by using one of the transfer systems specified in paragraphs (c)(1) through (c)(3) of this section.
40 CFR 63, §63.689(c)(1)	(1) A transfer system that uses covers in accordance with the requirements specified in paragraph (d) of this section.
40 CFR 63, §63.689(c)(2)	(2) A transfer system that consists of continuous hard-piping. All joints or seams between the pipe sections shall be permanently or semi-permanently sealed (e.g., a welded joint between two sections of metal pipe or a bolted and gasketed flange).
40 CFR 63, §63.689(c)(3)	(3) A transfer system that is enclosed and vented through a closed-vent system to a control device in accordance with the requirements specified in paragraphs (c)(3)(i) and (c)(3)(ii) of this section.
40 CFR 63, §63.689(c)(3)	(i) The transfer system is designed and operated such that an internal pressure in the vapor headspace in the enclosure is maintained at a level less than atmospheric pressure when the control device is operating, and
40 CFR 63, §63.689(c)(3)	(ii) The closed-vent system and control device are designed and operated in accordance with the requirements of §63.693 of this subpart.
40 CFR 63, §63.693(a)	(a) The provisions of this section apply to closed-vent systems and control devices used to control air emissions for which another standard references

	the use of this section for such air emission control.
40 CFR 63, §63.693(b)	(b) For each closed-vent system and control device used to comply with this section, the owner or operator shall meet the following requirements:
40 CFR 63, §63.693(b)(1)	(1) The owner or operator must use a closed-vent system that meets the requirements specified in paragraph (c) of this section.
40 CFR 63, §63.693(b)(2)	(2) The owner or operator must use a control device that meets the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this section.
40 CFR 63, §63.693(b)(3)	(3) Whenever gases or vapors containing HAP are vented through a closed-vent system connected to a control device used to comply with this section, the control device must be operating except at those times listed in either paragraph (b)(3)(i) or (b)(3)(ii) of this section.
40 CFR 63, §63.693(b)(3)	(i) The control device may be bypassed for the purpose of performing planned routine maintenance of the closed-vent system or control device in situations when the routine maintenance cannot be performed during periods that the emission point vented to the control device is shutdown. On an annual basis, the total time that the closed-vent system or control device is bypassed to perform routine maintenance shall not exceed 240 hours per each calendar year.
40 CFR 63, §63.693(b)(3)	(ii) The control device may be bypassed for the purpose of correcting a malfunction of the closed-vent system or control device. The owner or operator shall perform the adjustments or repairs necessary to correct the malfunction as soon as practicable after the malfunction is detected.
40 CFR 63, §63.693(b)(4)	(4) The owner or operator must inspect and monitor each closed-vent system in accordance with the requirements specified in either paragraph (b)(4)(i) or (b)(4)(ii) of this section.
40 CFR 63, §63.693(b)(4)	(i) The owner or operator inspects and monitors the closed-vent system in accordance with the requirements specified in §63.695(c) of this subpart, and complies with the applicable recordkeeping requirements in §63.696 of this subpart and the applicable reporting requirements in §63.697 of this subpart.
40 CFR 63, §63.693(b)(4)	(ii) As an alternative to meeting the requirements specified in paragraph (b)(4)(i) of this section, the owner or operator may choose to inspect and monitor the closed-vent system in accordance with the requirements under 40 CFR part 63, subpart H-National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 40 CFR 63.172(f) through (h), and complies with the applicable recordkeeping requirements in 40 CFR 63.181 and the applicable reporting requirements in 40 CFR 63.182.
40 CFR 63, §63.693(b)(5)	(5) The owner or operator must monitor the operation of each control device in accordance with the requirements specified in paragraphs (d) through (h) of this section as applicable to the type and design of the control device selected by the owner or operator to comply with the provisions of this

	section.
40 CFR 63, §63.693(b)(6)	(6) The owner or operator shall maintain records for each control device in accordance with the requirements of §63.696 of this subpart.
40 CFR 63, §63.693(b)(7)	(7) The owner or operator shall prepare and submit reports for each control device in accordance with the requirements of §63.697 of this subpart.
40 CFR 63, §63.693(c)	(c) Closed-vent system requirements.
40 CFR 63, §63.693(c)(1)	(1) The vent stream required to be controlled shall be conveyed to the control device by either of the following closed-vent systems:
40 CFR 63, §63.693(c)(1)	(i) A closed-vent system that is designed to operate with no detectable organic emissions using the procedure specified in §63.694(k) of this subpart; or
40 CFR 63, §63.693(c)(1)	(ii) A closed-vent system that is designed to operate at a pressure below atmospheric pressure. The system shall be equipped with at least one pressure gage or other pressure measurement device that can be read from a readily accessible location to verify that negative pressure is being maintained in the closed-vent system when the control device is operating.
40 CFR 63, §63.693(c)(2)	(2) In situations when the closed-vent system includes bypass devices that could be used to divert a vent stream from the closed-vent system to the atmosphere at a point upstream of the control device inlet, each bypass device must be equipped with either a flow indicator as specified in paragraph (c)(2)(i) of this section or a seal or locking device as specified in paragraph (c)(2)(ii) of this section. For the purpose of complying with this paragraph (c)(2), low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, or pressure relief valves needed for safety reasons are not subject to the requirements of this paragraph (c)(2).
40 CFR 63, §63.693(c)(2)	(i) If a flow indicator is used, the indicator must be installed at the entrance to the bypass line used to divert the vent stream from the closed-vent system to the atmosphere. The flow indicator must indicate a reading at least once every 15 minutes. The owner or operator must maintain records of the following information: hourly records of whether the flow indicator was operating and whether flow was detected at any time during the hour; and records of all periods when flow is detected or the flow indicator is not operating.
40 CFR 63, §63.693(c)(2)	(ii) If a seal or locking device is used to comply with paragraph (c)(2) of this section, the device shall be placed on the mechanism by which the bypass device position is controlled (*e.g.,* valve handle, damper lever) when the bypass device is in the closed position such that the bypass device cannot be opened without breaking the seal or removing the lock. Examples of such devices include, but are not limited to, a car-seal or a lock-and-key configuration valve.
40 CFR 63, §63.693(d)	(d) Carbon adsorption control device requirements.
40 CFR 63,	(1) The carbon adsorption system must achieve the performance

§63.693(d)(1)	specifications in either paragraph (d)(1)(i) or (d)(1)(ii) of this section.
40 CFR 63, §63.693(d)(1)	(i) Recover 95 percent or more, on a weight-basis, of the total organic compounds (TOC), less methane and ethane, contained in the vent stream entering the carbon adsorption system; or
40 CFR 63, §63.693(d)(1)	(ii) Recover 95 percent or more, on a weight-basis, of the total HAP listed in Table 1 of this subpart contained in the vent stream entering the carbon adsorption system.
40 CFR 63, §63.693(d)(2)	(2) The owner or operator must demonstrate that the carbon adsorption system achieves the performance requirements in paragraph (d)(1) of this section by either performing a performance test as specified in paragraph (d)(2)(i) of this section or a design analysis as specified in paragraph (d)(2)(ii) of this section.
40 CFR 63, §63.693(d)(2)	(i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.
40 CFR 63, §63.693(d)(2)	(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (d)(2)(ii)(A) or (d)(2)(ii)(B) of this section as applicable to the carbon adsorption system design.
40 CFR 63, §63.693(d)(2)(ii)	(B) For a nonregenerable carbon adsorption system (e.g., a carbon canister), the design analysis shall address the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration, carbon bed capacity, activated carbon type and working capacity, and design carbon replacement interval based on the total carbon working capacity of the control device and emission point operating schedule.
40 CFR 63, §63.693(d)(3)	(3) The owner or operator must monitor the operation of the carbon adsorption system in accordance with the requirements of §63.695(e) using one of the continuous monitoring systems specified in paragraphs (d)(3)(i) through (iii) of this section. Monitoring the operation of a nonregenerable carbon adsorption system (*e.g.,* a carbon canister) using a continuous monitoring system is not required when the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.
40 CFR 63, §63.693(d)(3)	(ii) A continuous monitoring system to measure and record the daily average concentration level of organic compounds in the exhaust gas stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.
40 CFR 63, §63.693(d)(4)	(4) The owner or operator shall manage the carbon used for the carbon adsorption system, as follows:

40 CFR 63, §63.693(d)(4)	(i) Following the initial startup of the control device, all carbon in the control device shall be replaced with fresh carbon on a regular, predetermined time interval that is no longer than the carbon service life established for the carbon adsorption system. The provisions of this paragraph (d)(4)(i) do not apply to a nonregenerable carbon adsorption system (*e.g.*, a carbon canister) for which the carbon canister or the carbon in the control device is replaced on a regular basis according to the requirements in paragraph (d)(4)(iii) of this section.
40 CFR 63, §63.693(d)(4)	(ii) The spent carbon removed from the carbon adsorption system must be either regenerated, reactivated, or burned in one of the units specified in paragraphs (d)(4)(ii)(A) through (d)(4)(ii)(G) of this section.
40 CFR 63, §63.693(d)(4)	(iii) As an alternative to meeting the requirements in paragraphs (d)(3) and (d)(4)(i) of this section, an owner or operator of a nonregenerable carbon adsorption system may choose to replace on a regular basis the carbon canister or the carbon in the control device using the procedures in either paragraph (d)(4)(iii)(A) or (d)(4)(iii)(B) of this section. For the purpose of complying with this paragraph (d)(4)(iii), a nonregenerable carbon adsorption system means a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device, such as a carbon canister. The spent carbon removed from the nonregenerable carbon adsorption system must be managed according to the requirements in paragraph (d)(4)(ii) of this section.
40 CFR 63, §63.693(d)(4)(iii)	(A) Monitor the concentration level of the organic compounds in the exhaust vent from the carbon adsorption system on a regular schedule, and when carbon breakthrough is indicated, immediately replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon. Measurement of the concentration level of the organic compounds in the exhaust vent stream must be made with a detection instrument that is appropriate for the composition of organic constituents in the vent stream and is routinely calibrated to measure the organic concentration level expected to occur at breakthrough. The monitoring frequency must be daily or at an interval no greater than 20 percent of the time required to consume the total carbon working capacity established as a requirement of paragraph (d)(2)(ii)(B) of this section, whichever is longer.
40 CFR 63, §63.693(d)(4)(iii)	(B) Replace either the existing carbon canister with a new carbon canister or replace the existing carbon in the control device with fresh carbon at a regular, predetermined time interval that is less than the design carbon replacement interval established as a requirement of paragraph (d)(2)(ii)(B) of this section.
40 CFR 63, §63.693(f)	(f) Vapor incinerator control device requirements.
40 CFR 63, §63.693(f)(1)	(1) The vapor incinerator must achieve the performance specifications in either paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii) of this section.

40 CFR 63, §63.693(f)(1)	(iii) Maintain the conditions in the vapor incinerator combustion chamber at a residence time of 0.5 seconds or longer and at a temperature of 760°C or higher.
40 CFR 63, §63.693(f)(2)	(2) The owner or operator must demonstrate that the vapor incinerator achieves the performance requirements in paragraph (f)(1) of this section by either performing a performance test as specified in paragraph (f)(2)(i) of this section or a design analysis as specified in paragraph (f)(2)(ii) of this section.
40 CFR 63, §63.693(f)(2)	(i) An owner or operator choosing to use a performance test to demonstrate compliance must conduct the test in accordance with the requirements of §63.694(l) of this subpart.
40 CFR 63, §63.693(f)(2)	(ii) An owner or operator choosing to use a design analysis to demonstrate compliance must include as part of this design analysis the information specified in either paragraph (f)(2)(ii)(A) or (f)(2)(ii)(B) of this section as applicable to the vapor incinerator design.
40 CFR 63, §63.693(f)(2)(ii)	(A) For a thermal vapor incinerator, the design analysis shall address the vent stream composition, constituent concentrations, and flow rate and shall establish the design minimum and average temperatures in the combustion chamber and the combustion chamber residence time.
40 CFR 63, §63.693(f)(3)	(3) The owner or operator must monitor the operation of the vapor incinerator in accordance with the requirements of §63.695(e) of this subpart using one of the continuous monitoring systems specified in paragraphs (f)(3)(i) through (f)(3)(iv) of this section as applicable to the type of vapor incinerator used.
40 CFR 63, §63.693(f)(3)	(i) For a thermal vapor incinerator, a continuous parameter monitoring system to measure and record the daily average temperature of the exhaust gases from the control device. The accuracy of the temperature monitoring device must be ±1 percent of the temperature being measured, expressed in degrees Celsius of ±0.5 °C, whichever is greater.
40 CFR 63, §63.693(f)(3)	(iii) For either type of vapor incinerator, a continuous monitoring system to measure and record the daily average concentration of organic compounds in the exhaust vent stream from the control device. The organic monitoring system must comply either with Performance Specification 8 or 9 in 40 CFR part 60, appendix B. The relative accuracy provision of Performance Specification 8, Sections 2.4 and 3 need not be conducted.
40 CFR 63, §63.695(a)	(a) This section specifies the inspection and monitoring procedures required to perform the following:
40 CFR 63, §63.695(a)(2)	(2) To inspect and monitor closed-vent systems for compliance with the standards specified in §63.693 of this subpart, the inspection and monitoring procedures are specified in paragraph (c) of this section.
40 CFR 63, §63.695(a)(3)	(3) To inspect and monitor transfer system covers for compliance with the standards specified in §63.689(c)(1) of this subpart, the inspection and monitoring procedures are specified in paragraph (d) of this section.

40 CFR 63, §63.695(a)(4)	(4) To monitor and record off-site material treatment processes for compliance with the standards specified in 63.684(e), the monitoring procedures are specified in paragraph (e) of this section.
40 CFR 63, §63.695(b)	(b) Tank Level 2 fixed roof and floating roof inspection requirements.
40 CFR 63, §63.695(b)(3)	(3) Owners and operators that use a tank equipped with a fixed roof in accordance with the provisions of §63.685(g) of this subpart shall meet the following requirements:
40 CFR 63, §63.695(b)(3)	(i) The fixed roof and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the roof sections or between the roof and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a tank is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.
40 CFR 63, §63.695(b)(3)	(ii) The owner or operator must perform an initial inspection following installation of the fixed roof. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.
40 CFR 63, §63.695(b)(3)	(iii) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (b)(4) of this section.
40 CFR 63, §63.695(b)(3)	(iv) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696(e) of this subpart.
40 CFR 63, §63.695(b)(4)	(4) The owner or operator shall repair each defect detected during an inspection performed in accordance with the requirements of paragraph (b)(1), (b)(2), or (b)(3) of this section in the following manner:
40 CFR 63, §63.695(b)(4)	(i) The owner or operator shall within 45 calendar days of detecting the defect either repair the defect or empty the tank and remove it from service. If within this 45-day period the defect cannot be repaired or the tank cannot be removed from service without disrupting operations at the plant site, the owner or operator is allowed two 30-day extensions. In cases when an owner or operator elects to use a 30-day extension, the owner or operator shall prepare and maintain documentation describing the defect, explaining why alternative storage capacity is not available, and specify a schedule of actions that will ensure that the control equipment will be repaired or the tank emptied as soon as possible.
40 CFR 63, §63.695(b)(4)	(ii) When a defect is detected during an inspection of a tank that has been emptied and degassed, the owner or operator shall repair the defect before refilling the tank.

40 CFR 63, §63.695(c)	(c) Owners and operators that use a closed-vent system in accordance with the provisions of §63.693 of this subpart shall meet the following inspection and monitoring requirements:
40 CFR 63, §63.695(c)(1)	(1) Each closed-vent system that is used to comply with §63.693(c)(1)(i) of this subpart shall be inspected and monitored in accordance with the following requirements:
40 CFR 63, §63.695(c)(1)	(i) At initial startup, the owner or operator shall monitor the closed-vent system components and connections using the procedures specified in §63.694(k) of this subpart to demonstrate that the closed-vent system operates with no detectable organic emissions.
40 CFR 63, §63.695(c)(1)	(ii) After initial startup, the owner or operator shall inspect and monitor the closed-vent system as follows:
40 CFR 63, §63.695(c)(1)(ii)	(A) Closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange) shall be visually inspected at least once per year to check for defects that could result in air emissions. The owner or operator shall monitor a component or connection using the procedures specified in §63.694(k) of this subpart to demonstrate that it operates with no detectable organic emissions following any time the component is repaired or replaced (e.g., a section of damaged hard piping is replaced with new hard piping) or the connection is unsealed (e.g., a flange is unbolted).
40 CFR 63, §63.695(c)(1)(ii)	(B) Closed-vent system components or connections other than those specified in paragraph (c)(1)(ii)(A) of this section, shall be monitored at least once per year using the procedures specified in §63.694(k) of this subpart to demonstrate that components or connections operate with no detectable organic emissions.
40 CFR 63, §63.695(c)(1)(ii)	(C) The continuous monitoring system required by §63.693(b)(4)(i) shall monitor and record either an instantaneous data value at least once every 15 minutes or an average value for intervals of 15 minutes or less.
40 CFR 63, §63.695(c)(1)(ii)	(D) The owner or operator shall visually inspect the seal or closure mechanism required by §63.693(c)(2)(ii) at least once every month to verify that the bypass mechanism is maintained in the closed position.
40 CFR 63, §63.695(c)(1)	(iv) The owner or operator shall maintain a record of the inspection and monitoring in accordance with the requirements specified in §63.696 of this subpart.
40 CFR 63, §63.695(c)(3)	(3) The owner or operator shall repair all detected defects as follows:
40 CFR 63, §63.695(c)(3)	(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection.
40 CFR 63, §63.695(c)(3)	(ii) Repair of a defect may be delayed beyond 45 calendar days if either of the conditions specified in paragraph (c)(3)(ii)(A) or (c)(3)(ii)(B) occurs. In this case, the owner or operator must repair the defect the next time the process or unit that vents to the closed-vent system is shutdown. Repair of

	the defect must be completed before the process or unit resumes operation.
40 CFR 63, §63.695(c)(3)(ii)	(A) Completion of the repair is technically infeasible without the shutdown of the process or unit that vents to the closed-vent system.
40 CFR 63, §63.695(c)(3)(ii)	(B) The owner or operator determines that the air emissions resulting from the repair of the defect within the specified period would be greater than the fugitive emissions likely to result by delaying the repair until the next time the process or unit that vents to the closed-vent system is shutdown.
40 CFR 63, §63.695(c)(3)	(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §63.696 of this subpart.
40 CFR 63, §63.695(d)	(d) Owners and operators that use a transfer system equipped with a cover in accordance with the provisions of §63.689(c)(1) of this subpart shall meet the following inspection requirements:
40 CFR 63, §63.695(d)(1)	(1) The cover and its closure devices shall be visually inspected by the owner or operator to check for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover sections or between the cover and its mounting; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case when a transfer system is buried partially or entirely underground, inspection is required only for those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., access hatches, etc.) and can be opened to the atmosphere.
40 CFR 63, §63.695(d)(2)	(2) The owner or operator must perform an initial inspection following installation of the cover. Thereafter, the owner or operator must perform the inspections at least once every calendar year except as provided for in paragraph (f) of this section.
40 CFR 63, §63.695(d)(3)	(3) In the event that a defect is detected, the owner or operator shall repair the defect in accordance with the requirements of paragraph (d)(5) of this section.
40 CFR 63, §63.695(d)(4)	(4) The owner or operator shall maintain a record of the inspection in accordance with the requirements specified in §63.696 of this subpart.
40 CFR 63, §63.695(d)(5)	(5) The owner or operator shall repair all detected defects as follows:
40 CFR 63, §63.695(d)(5)	(i) The owner or operator shall make first efforts at repair of the defect no later than 5 calendar days after detection and repair shall be completed as soon as possible but no later than 45 calendar days after detection except as provided in paragraph (d)(5)(ii) of this section.
40 CFR 63, §63.695(d)(5)	(ii) Repair of a defect may be delayed beyond 45 calendar days if the owner or operator determines that repair of the defect requires emptying or temporary removal from service of the transfer system and no alternative transfer system is available at the site to accept the material normally handled by the system. In this case, the owner or operator shall repair the defect the next time the process or unit that is generating the material handled by the transfer system stops operation. Repair of the defect must be

	completed before the process or unit resumes operation.
40 CFR 63, §63.695(d)(5)	(iii) The owner or operator shall maintain a record of the defect repair in accordance with the requirements specified in §63.696 of this subpart.
40 CFR 63, §63.695(e)	(e) *Control device monitoring requirements.* For each control device required under §63.693 of this subpart to be monitored in accordance with the provisions of this paragraph (e), the owner or operator must ensure that each control device operates properly by monitoring the control device in accordance with the requirements specified in paragraphs (e)(1) through (e)(7) of this section.
40 CFR 63, §63.695(e)(1)	(1) A continuous parameter monitoring system must be used to measure the operating parameter or parameters specified for the control device in §63.693(d) through §63.693(g) of this subpart as applicable to the type and design of the control device. The continuous parameter monitoring system must meet the following specifications and requirements:
40 CFR 63, §63.695(e)(1)	(i) The continuous parameter monitoring system must measure either an instantaneous value at least once every 15 minutes or an average value for intervals of 15 minutes or less and continuously record either:
40 CFR 63, §63.695(e)(1)(i)	(A) Each measured data value; or
40 CFR 63, §63.695(e)(1)(i)	(B) Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
40 CFR 63, §63.695(e)(1)	(ii) The monitoring system must be installed, calibrated, operated, and maintained in accordance with the manufacturer's specifications or other written procedures that provide reasonable assurance that the monitoring equipment is operating properly.
40 CFR 63, §63.695(e)(2)	(2) Using the data recorded by the monitoring system, the owner or operator must calculate the daily average value for each monitored operating parameter for each operating day. If operation of the control device is continuous, the operating day is a 24-hour period. If control device operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.
40 CFR 63, §63.695(e)(3)	(3) For each monitored operating parameter, the owner or operator must establish a minimum operating parameter value or a maximum operating parameter value, as appropriate, to define the range of conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in §63.693(b)(2) of this subpart. Each minimum or maximum operating parameter value must be established in accordance with the requirements in paragraphs (e)(3)(i) and (e)(3)(ii) of this section.

40 CFR 63, §63.695(e)(3)	(i) If the owner or operator conducts a performance test to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on values measured during the performance test and supplemented, as necessary, by the control device design specifications, manufacturer recommendations, or other applicable information.
40 CFR 63, §63.695(e)(3)	(ii) If the owner or operator uses a control device design analysis to demonstrate control device performance, then the minimum or maximum operating parameter value must be established based on the control device design analysis and supplemented, as necessary, by the control device manufacturer recommendations or other applicable information.
40 CFR 63, §63.695(e)(4)	(4) An excursion for a given control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified in paragraphs (e)(4)(i) through (e)(4)(iii) of this section being met. When multiple operating parameters are monitored for the same control device and during the same operating day more than one of these operating parameters meets an excursion criterion specified in paragraphs (e)(4)(i) through (e)(4)(iii) of this section, then a single excursion is determined to have occurred for the control device for that operating day.
40 CFR 63, §63.695(e)(4)	(i) An excursion occurs when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter in accordance with the requirements of paragraph (e)(3) of this section.
40 CFR 63, §63.695(e)(4)	(ii) An excursion occurs when the period of control device operation is 4 hours or greater in an operating day and the monitoring data are insufficient to constitute a valid hour of data for at least 75 percent of the operating hours. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
40 CFR 63, §63.695(e)(4)	(iii) An excursion occurs when the period of control device operation is less than 4 hours in an operating day and more than 1 of the hours during the period does not constitute a valid hour of data due to insufficient monitoring data. Monitoring data are insufficient to constitute a valid hour of data if measured values are unavailable for any of the 15-minute periods within the hour.
40 CFR 63, §63.696(a)	(a) The owner or operator subject to this subpart shall comply with the recordkeeping requirements in §63.10 under 40 CFR 63 subpart A-General Provisions that are applicable to this subpart as specified in Table 2 of this subpart.
40 CFR 63, §63.696(b)	(b) The owner or operator of a control device subject to this subpart shall maintain the records in accordance with the requirements of 40 CFR 63.10 of this part.
40 CFR 63, §63.696(e)	(e) Each owner or operator using a fixed roof to comply with the tank control requirements specified in §63.685(g) of this subpart shall prepare

	and maintain the following records:
40 CFR 63, §63.696(e)(1)	(1) A record for each inspection required by §63.695(b) of this subpart, as applicable to the tank, that includes the following information: a tank identification number (or other unique identification description as selected by the owner or operator) and the date of inspection.
40 CFR 63, §63.696(e)(2)	(2) The owner or operator shall record for each defect detected during inspections required by §63.695(b) of this subpart the following information: the location of the defect, a description of the defect, the date of detection, and corrective action taken to repair the defect. In the event that repair of the defect is delayed in accordance with the provisions of §63.695(b)(4) of this section, the owner or operator shall also record the reason for the delay and the date that completion of repair of the defect is expected.
40 CFR 63, §63.696(g)	(g) An owner or operator shall record, on a semiannual basis, the information specified in paragraphs (g)(1) and (g)(2) of this section for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.693(d) through (h) of this subpart, as applicable.
40 CFR 63, §63.696(g)(1)	(1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods.
40 CFR 63, §63.696(g)(2)	(2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during these 6 months that the control device did not meet the requirement of §63.693 (d) through (h) of this subpart, as applicable, due to planned routine maintenance.
40 CFR 63, §63.696(h)	(h) An owner or operator shall record the information specified in paragraphs (h)(1) through (h)(3) of this section for those unexpected control device system malfunctions that would require the control device not to meet the requirements of §63.693 (d) through (h) of this subpart, as applicable.
40 CFR 63, §63.696(h)(1)	(1) The occurrence and duration of each malfunction of the control device system.
40 CFR 63, §63.696(h)(2)	(2) The duration of each period during a malfunction when gases, vapors, or fumes are vented from the waste management unit through the closed-vent system to the control device while the control device is not properly functioning.
40 CFR 63, §63.696(h)(3)	(3) Actions taken during periods of malfunction to restore a malfunctioning control device to its normal or usual manner of operation.
40 CFR 63, §63.697(a)	(a) Each owner or operator of an affected source subject to this subpart must comply with the notification requirements specified in paragraph (a)(1) of this section and the reporting requirements specified in paragraph (a)(2) of

	this section.
40 CFR 63, §63.697(a)(1)	(1) The owner or operator of an affected source must submit notices to the Administrator in accordance with the applicable notification requirements in 40 CFR 63.9 as specified in Table 2 of this subpart. For the purpose of this subpart, an owner or operator subject to the initial notification requirements under 40 CFR 63.9(b)(2) must submit the required notification on or before October 19, 1999.
40 CFR 63, §63.697(a)(2)	(2) The owner or operator of an affected source must submit reports to the Administrator in accordance with the applicable reporting requirements in 40 CFR 63.10 as specified in Table 2 of this subpart.
40 CFR 63, §63.697(b)	(b) The owner or operator of a control device used to meet the requirements of §63.693 of this subpart shall submit the following notifications and reports to the Administrator:
40 CFR 63, §63.697(b)(1)	(1) A Notification of Performance Tests specified in §63.7 and §63.9(g) of this part,
40 CFR 63, §63.697(b)(2)	(2) Performance test reports specified in §63.10(d)(2) of this part, and
40 CFR 63, §63.697(b)(3)	(3) Startup, shutdown, and malfunction reports specified in §63.10(d)(5) of this part.
40 CFR 63, §63.697(b)(3)	(i) If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are not completely consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3) of this part, the owner or operator shall state such information in the report. The startup, shutdown, or malfunction report shall consist of a letter, containing the name, title, and signature of the responsible official who is certifying its accuracy, that shall be submitted to the Administrator, and
40 CFR 63, §63.697(b)(3)	(ii) Separate startup, shutdown, or malfunction reports are not required if the information is included in the summary report specified in paragraph (b)(4) of this section.
40 CFR 63, §63.697(b)(4)	(4) A summary report specified in §63.10(e)(3) of this part shall be submitted on a semiannual basis (i.e., once every 6-month period). The summary report must include a description of all excursions as defined in §63.695(e) of this subpart that have occurred during the 6-month reporting period. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the exceedance occurred. For each excursion caused by lack of monitoring data, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.

Sources subject to 40 CFR Part 63, Subpart EEE

Source Description

The kiln, bypass, coal mill and clinker cooler all vent to this stack.

Specific Conditions

52. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with the PM/PM_{10} emission rates through compliance with Specific Condition 54 and Plantwide Condition 9. Compliance with the SO_2, VOC, CO, and NO_x rates shall be demonstrated through compliance with Plantwide Condition 9. Compliance with the lead emission rates shall be demonstrated through compliance with Specific Condition 55. [Regulation 19, §19.901 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
443.BF10	Vents to 443.SK10		
443.BF30	Vents to 443.SK10		
443.SK10	PM	31.0	119.3
	PM_{10}	31.0	119.3
	SO_2	616.0[1]	2,699.0
	VOC	27.5[1]	120.5
	CO	2,500[2]	1,714.0
	NO_x	678.0[1]	2,970.0
	Lead	0.14	0.7

1. 30-day rolling average value
2. 8-hour average

53. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with the PM/PM_{10} emission rate through compliance with Specific Condition 54 and Plantwide Condition 9. Compliance with the HAP emission rates shall be demonstrated through compliance Specific Condition 55. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
443.BF10	Vents to 443.SK10		
443.BF30	Vents to 443.SK10		

443.SK10	1,1,1-Trichloroethane 1,1,2,2-Tetrachloroethane 1,1,2-Trichloroethane 1,1-Dichloroethane 1,1-Dimethyl hydrazine 1,2-Dibromo-3-chloropropane 1,2-Dichloroethane 1,2-Dichloropropane 1,2-Diphenylhydrazine 1,2-Epoxybutane 1,2-Propylenimine (2-Methylaziridine) 1,3-Butadiene 1,3-Propane sultone 1,4-Dioxane 1,4-Phenylenediamine 2,2,4-Trimethylpentane 2,3,7,8-Tetrachlorodibenzo-p-dioxin 2,4-D, salts and esters 2,4-Toluene diamine 2,4-Toluene diisocyanate 2-Acetylaminofluorene 2-Chloroacetophenone 2-Nitropropane 3,3-Dimethoxybenzidine 3,3'-Dimethyl benzidine 4,4-Methylenebis(2-chloroaniline) 4,4'-Methylenedianiline 4,6-Dinitro-o-cresol, and salts 4-Nitrobiphenyl Acetaldehyde Acetamide Acetonitrile Acetophenone Acrolein Acrylic acid Benzene Benzotrichloride Benzyl chloride beta-Propiolactone Biphenyl Bromoform Calcium cyanamide Captan Carbaryl Carbonyl sulfide	27.5**	120.5**

	Catechol Chloramben Chlordane Chloroacetic acid Chlorobenzilate Chloromethyl methyl ether Chloroprene Cresols/Cresylic acid DDE Diazomethane Dibutylphthalate Dichlorvos Diethanolamine Diethyl sulfate Dimethyl aminoazobenzene Dimethyl carbamoyl chloride Dimethyl formamide Dimethyl sulfate Epichlorohydrin (l-Chloro-2,3epoxypropane) Ethyl carbamate (Urethane) Ethyl chloride (Chloroethane) Ethylene dibromide Ethylene glycol Ethylene imine (Aziridine) Ethylene oxide Ethylene thiourea Ethylidene dichloride Formaldehyde Glycol ethers Heptachlor Hexamethylene-1,6-diisocyanate Hexamethylphosphoramide Hydrazine Lindane (all isomers) Maleic anhydride m-Cresol Methanol Methoxychlor Methyl hydrazine Methyl isobutyl ketone (Hexone) Methyl isocyanate Methyl Methacrylate Methyl tert-butyl ether Methylene diphenyl diisocyanate N,N-Dimethylaniline		

	N-Nitrosodimethylamine N-Nitrosomorpholine N-Nitroso-N-methylurea o-Anisidine o-Cresol Parathion p-Cresol Phosgene Phosphine Phthalic anhydride Polychlorinated biphenyls Propionaldehyde Propoxur (Baygon) Propylene oxide Quinoline Quinone Styrene oxide Tetrachloroethylene Toxaphene (chlorinated camphene) trans-1,3-Dichloropropene Trichloroethylene Triethylamine Trifluralin Vinyl acetate Vinyl chloride		
	Dioxin/Furan	2.93E-7	1.3E-6
	HCl Hydrogen fluoride Hydrogen sulfide Chlorine Titanium tetrachloride Carbon tetrachloride	95.1	416.6
	Arsenic Beryllium Cadmium Chromium Mercury	0.04 0.04 0.14 0.04 0.09	0.2 0.2 0.7 0.2 0.4
	Antimony Asbestos Cobalt Cyanide Compounds Fine mineral fibers Manganese	27.3*	119.3*

	Nickel Phosphorus Polycylic Organic Matter Radionuclides (including radon) Selenium		
	Hexachlorobenzene	1.7	0.1
	Acrylamide	2.5	0.1
	Bis(chloromethyl)ether	4.0	0.1

*Compliance shown through compliance with the PM/PM_{10} emission rate
** Compliance shown through compliance with the VOC limit

54. For the purpose of demonstrating compliance with the particulate matter standard of 0.15 kg/Mg dry feed (0.3 lb/ton dry feed) set forth in 40 CFR 63, Subpart EEE, the permittee shall comply with the requested limit of 0.0069 gr/dscf at 7 percent O_2 which was used in the PM netting analysis. The requested limit is more restrictive than the particulate matter standard in 40 CFR Part 63, Subpart EEE. For the purpose of demonstrating compliance with 0.0069 gr/dscf at 7 percent O_2 the permittee shall determine the portion of the stack gas emitted at SN-443.SK10 which shall be attributed to combustion processes taking place in the kilns. While the 0.0069 gr/dscf standard shall apply to the entire stream exiting the stack, only the portion of the total stack gas made up of gases from the kiln, coal-mill and bypass shall be corrected to 7 percent O_2. This determination shall be made by following the method listed below.

a. Determine the quantity by volume from each source in the stack gas.
    i. Measure the air flow rate from the clinker cooler, the temperature of the stream before it is ducted through the raw mill, and assuming a 21% O_2 concentration, and;
    ii. Measure the total air flow rate, O_2 content and temperature of the main stack gases.
b. Convert both air flow rates to dry standard conditions.
c. Determine the volume of combustion gases generated from the kiln, coal-mill and bypass by subtracting the air flow from the clinker cooler from the total volume of stack gases.
d. Use the volume of the gases to determine the fraction of the total stack gases for each stream.

$$P_{cc} = (V_{cc}/V_{tsg}) \qquad P_{cg} = 1 - P_{cc}$$

where: P_{cc} = fraction of total stack gases attributed to the clinker cooler
V_{cc} = Volume of gases from clinker cooler (dscf)
V_{tsg} = volume of total stack gas (dscf)
P_{cg} = fraction of total stack gas attributed to the combustion emissions

e. Calculate the O_2 content of the combustion gas stream using the following equation

$$O2_{cg} = \frac{O2_{tsg} - (O2_{cc} \times P_{cc})}{P_{cg}}$$

where: $O2_{cg}$ = oxygen concentration of the combustion gases
$O2_{tsg}$ = measured oxygen concentration of total stack gases
$O2_{cc}$ = oxygen concentration of clinker cooler gases (assumed to be 21%)
P_{cc} = fraction of total stack gases attributed to the clinker cooler
P_{cg} = fraction of total stack gas attributed to the combustion emissions

f. The 0.0069 gr/dscf shall apply to the entire combined stream, but only the volume of combustion gases shall be corrected to 7% O_2. The maximum allowable particulate matter emissions in pounds per hour of the total stream shall be determined using the following equation

$0.0069 \text{ gr/dscf} \times (V_{cc} + V_{cg}) \times 1 \text{ lb}/7000 \text{ gr} \times 60 \text{ min/hr}$

where: V_{cc} = Volume of clinker cooler gas
V_{cg} = Volume of combustion gas corrected to 7% O_2

55. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the VOC and CO emission rates shall be demonstrated through use of the CEMS required under Specific Condition 56. The permittee shall organize the data to reflect the averaging times listed below. [Regulation 19, §19.901 and 40 CFR Part 52, Subpart E]

Pollutant	BACT Limit	Averaging Time
VOC	27.5 lb/hr	30-day rolling average
CO	2500 lb/hr	8-hr average

56. These sources are considered affected sources under 40 CFR Part 63, Subpart EEE, and are subject, but not limited to the conditions listed in Appendix I. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart EEE]

57. The requirements of 40 CFR 63, Subpart LLL for in-line kiln/raw mill are not applicable to the in-line kiln/raw mill at the Foreman cement plant. The plant shall operate in compliance with the requirements of 40 CFR 63, Subpart EEE, as found in Appendix I, at all times, whether hazardous waste is being combusted or not. Only in the event that Ash Grove permanently ceases combustion of hazardous waste in the kiln system, and undergoes and completes RCRA closure requirements and otherwise completes all obligations to terminate coverage of 40 CFR Part 63, Subpart EEE, will the

in-line kiln/raw shall become subject to the applicable requirements of 40 CFR Part 63, Subpart LLL. [Regulation 19, §19.304 and 40 CFR Part 63, Subpart EEE §1206(b)(1)]

58. The permittee shall conduct testing to determine the emission rate of condensable particulate matter at SN-443.SK10. This testing shall be conducted in accordance with EPA Method 202 or a Department approved alternative. If necessary, the permittee shall modify this permit to include a condensable particulate emission rate. The initial testing shall be performed at the same time as the CPT required by 40 CFR Part 63, Subpart EEE. This testing shall be performed a minimum of once every five years. A copy of these test results shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-710.EG10
Emergency Generator

Source Description

This is a diesel fired generator that is only allowed to operate 500 hours per year.

Specific Conditions

59. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 61. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.4	0.1
SO_2	2.0	0.5
VOC	0.4	0.1
CO	2.7	0.7
NO_x	7.5	1.9

60. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 61. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.4	0.1

61. The permittee shall not operate this source in excess of 500 hours per consecutive twelve month period. The permittee shall maintain records of the hours of operation of this source. These records shall be updated as necessary. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

62. This source is considered an affected source under 40 CFR Part 60, Subpart IIII, and is subject, but not limited to, the requirements found in the following table. [Regulation 19, §19.304 and 40 CFR Part 60, Subpart IIII]

40 CFR Part 60, Subpart IIII	
40 CFR 60, §60.4200(a)	(a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (3) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
40 CFR 60, §60.4200(a)(1)	(1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
40 CFR 60, §60.4200(a)(1)(i)	(i) 2007 or later, for engines that are not fire pump engines,
40 CFR 60, §60.4202(a)	(a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
40 CFR 60, §60.4202(a)(2)	(2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
40 CFR 60, §60.4202(c)	(c) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power.
40 CFR 60, §60.4205(b)	(b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
40 CFR 60, §60.4206	Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in § 60.4204 and 60.4205 according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.
40 CFR 60, §60.4207(a)	(a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).

40 CFR 60, §60.4207(b)	(b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel.
40 CFR 60, §60.4208(a)	(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
40 CFR 60, §60.4208(e)	(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
40 CFR 60, §60.4208(g)	(g) In addition to the requirements specified in § 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (f) of this section after the dates specified in paragraphs (a) through (f) of this section.
40 CFR 60, §60.4209(a)	(a) If you are an owner or operator of an emergency stationary CI internal combustion engine, you must install a non-resettable hour meter prior to startup of the engine.
40 CFR 60, §60.4209(b)	(b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
40 CFR 60, §60.4211(a)	(a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. You must also meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
40 CFR 60, §60.4211(c)	(c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's specifications.

40 CFR 60, §60.4211(d)	(d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
40 CFR 60, §60.4211(d)(1)	(1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.
40 CFR 60, §60.4211(d)(2)	(2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
40 CFR 60, §60.4211(d)(2)(i)	(i) Identification of the specific parameters you propose to monitor continuously;
40 CFR 60, §60.4211(d)(2)(ii)	(ii) A discussion of the relationship between these parameters and NO_X and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NO_X and PM emissions;
40 CFR 60, §60.4211(d)(2)(iii)	(iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
40 CFR 60, §60.4211(d)(2)(iv)	(iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
40 CFR 60, §60.4211(d)(2)(v)	(v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
40 CFR 60, §60.4211(e)	(e) Emergency stationary ICE may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of emergency stationary ICE in emergency situations. Anyone may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. For owners and operators of emergency engines meeting standards under § 60.4205 but not § 60.4204, any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited.
40 CFR 60, §60.4212(a)	(a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F.

40 CFR 60, §60.4212(b)	(b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
40 CFR 60, §60.4212(c)	(c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation: NTE requirement for each pollutant = (1.25) × (STD) Where: STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable. Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in § 60.4213 of this subpart, as appropriate.
40 CFR 60, §60.4213(a)	(a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.
40 CFR 60, §60.4213(b)	(b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).
40 CFR 60, §60.4213(c)	(c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.
40 CFR 60, §60.4213(d)	(d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.
40 CFR 60, §60.4213(d)(1)	(1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement: $(C_i – Co)/C_i$ x 100 = R Where: C_i = concentration of NO_X or PM at the control device inlet, C_o = concentration of NO_X or PM at the control device outlet, and R = percent reduction of NO_X or PM emissions.

40 CFR 60, §60.4213(d)(2)	(2) You must normalize the NO_X or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O_2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO_2) using the procedures described in paragraph (d)(3) of this section. $C_{adj} = C_d$ x 5.9/(20.9-%O2) Where: C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2. C_d = Measured concentration of NO_X or PM, uncorrected. 5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent. $\%O_2$ = Measured O_2 concentration, dry basis, percent.
40 CFR 60, §60.4213(d)(3)	(3) If pollutant concentrations are to be corrected to 15 percent O_2 and CO_2 concentration is measured in lieu of O_2 concentration measurement, a CO_2 correction factor is needed. Calculate the CO_2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.
40 CFR 60, §60.4213(d)(3)(i)	(i) Calculate the fuel-specific F_o value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation: $Fo = 0.209_{Fd} / F_c$ Where: F_o = Fuel factor based on the ratio of O_2 volume to the ultimate CO_2 volume produced by the fuel at zero percent excess air. 0.209 = Fraction of air that is O_2, percent/100. F_d = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, $dsm^3(dscf/10^6u)$. F_c = Ratio of the volume of CO_2 produced to the gross calorific value of the fuel from Method 19, $dsm^3(dscf/10^6u)$.
40 CFR 60, §60.4213(d)(3)(ii)	(ii) Calculate the CO_2 correction factor for correcting measurement data to 15 percent O_2, as follows: $X_{CO2} = 5.9/F_o$ Where: X_{CO2} = CO_2 correction factor, percent. 5.9 = 20.9 percent O_2-15 percent O_2, the defined O_2 correction value, percent.
40 CFR 60, §60.4213(d)(3)(iii)	(iii) Calculate the NO_X and PM gas concentrations adjusted to 15 percent O_2 using CO_2 as follows: $C_{adj} = C_d$ x ($X_{CO2}/\%CO_2$) Where: C_{adj} = Calculated NO_X or PM concentration adjusted to 15 percent O_2. C_d = Measured concentration of NO_X or PM, uncorrected. $\%CO_2$ = Measured CO_2 concentration, dry basis, percent.

40 CFR 60, §60.4213(e)	(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section: ER = (C_d x 1.912 x 10^{-3} x Q x T)/KW-hour Where: ER = Emission rate in grams per KW-hour. C_d = Measured NO_X concentration in ppm. $1.912x10^{-3}$Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius. Q = Stack gas volumetric flow rate, in standard cubic meter per hour. T = Time of test run, in hours. KW-hour = Brake work of the engine, in KW-hour.
40 CFR 60, §60.4213(f)	(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section: ER = (C_{adj} x Q x T)/KW-hour Where: ER = Emission rate in grams per KW-hour. C_{adj} = Calculated PM concentration in grams per standard cubic meter. Q = Stack gas volumetric flow rate, in standard cubic meter per hour. T = Time of test run, in hours. KW-hour = Energy output of the engine, in KW.
40 CFR 60, §60.4214(b)	(b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
40 CFR 60, §60.4214(c)	(c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

Haul Roads

Source Description

These roads are used to move raw materials and product throughout the plant.

Specific Conditions

63. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 65. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
111.R1A-F	Quarry Haul Road	PM_{10}	6.9	6.9
ADDS	Additive Deliveries	PM_{10}	0.1	0.1
BWDF	BWDF Deliveries to Preheater Area	PM_{10}	0.1	0.2
CACL	CaCl Deliveries to Preheater Area	PM_{10}	0.1	0.1
CACLALT	CaCl Deliveries to Preheater Area Alternate Route	PM_{10}	0.1	0.1
CEM	Current Cement Loadout Road	PM_{10}	0.2	0.2
CEM20	Current Cement Loadout Road Truck/Rail Loadout	PM_{10}	0.1	0.1
CEM80	Current Cement Loadout Road Truck Loadout	PM_{10}	0.1	0.1
CKD	CKD from Pug Mill to Landfill	PM_{10}	0.1	0.1
CKDS	CKD from Pug Mill to Highway	PM_{10}	0.2	0.1
CLKD	Clinker Delivery to Railcar Unloading	PM_{10}	0.2	0.1
CLKR	Clinker from Railcar Unloading to Dome	PM_{10}	0.3	0.1
COAL	Coal Delivery by Truck	PM_{10}	0.1	0.1
COAL2WY	Coal Delivery by Truck 2-way Traffic	PM_{10}	0.4	0.4
COAL2WYALT	Coal Delivery by Truck 2-way Traffic	PM_{10}	0.4	0.5

COALALT	Coal Delivery by Truck	PM_{10}	0.1	0.1
DRYLIME	Dry Lime Delivery to Preheater Area	PM_{10}	0.1	0.1
DRYLIMEALT	Dry Lime Delivery to Preheater Area Alternate Route	PM_{10}	0.1	0.1
GYP	Gypsum Delivery by Truck	PM_{10}	0.2	0.1
GYP2WY	Gypsum Delivery by Truck 2-way Traffic	PM_{10}	0.7	0.3
GYP2WYALT	Gypsum Delivery by Truck	PM_{10}	0.8	0.4
GYPALT	Gypsum Delivery by Truck 2-way Traffic	PM_{10}	0.2	0.1
NCEM	2007 Cement Loadout Road	PM_{10}	0.7	2.1
RM	Raw Materials to Building	PM_{10}	0.2	0.2
RM2WY	Raw Materials to Building 2-way Traffic	PM_{10}	0.5	0.3
RM2WYALT	Raw Materials to Building Alternate Route	PM_{10}	0.7	0.4
RMALT	Raw Materials to Building 2-way Traffic Alternate Route	PM_{10}	0.2	0.2
SLWDFTIRES	SWDF, LWDF and Tires Delivery	PM_{10}	0.3	1.1

64. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 65. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
111.R1A-F	Quarry Haul Road	PM	6.9	6.9
ADDS	Additive Deliveries	PM	0.1	0.1
BWDF	BWDF Deliveries to Preheater Area	PM	0.1	0.2
CACL	CaCl Deliveries to Preheater Area	PM	0.1	0.1
CACLALT	CaCl Deliveries to Preheater Area Alternate	PM	0.1	0.1

	Route			
CEM	Current Cement Loadout Road	PM	0.2	0.2
CEM20	Current Cement Loadout Road Truck/Rail Loadout	PM	0.1	0.1
CEM80	Current Cement Loadout Road Truck Loadout	PM	0.1	0.1
CKD	CKD from Pug Mill to Landfill	PM	0.1	0.1
CKDS	CKD from Pug Mill to Highway	PM	0.2	0.1
CLKD	Clinker Delivery to Railcar Unloading	PM	0.2	0.1
CLKR	Clinker from Railcar Unloading to Dome	PM	0.3	0.1
COAL	Coal Delivery by Truck	PM	0.1	0.1
COAL2WY	Coal Delivery by Truck 2-way Traffic	PM	0.4	0.4
COAL2WYALT	Coal Delivery by Truck 2-way Traffic	PM	0.4	0.5
COALALT	Coal Delivery by Truck	PM	0.1	0.1
DRYLIME	Dry Lime Delivery to Preheater Area	PM	0.1	0.1
DRYLIMEALT	Dry Lime Delivery to Preheater Area Alternate Route	PM	0.1	0.1
GYP	Gypsum Delivery by Truck	PM	0.2	0.1
GYP2WY	Gypsum Delivery by Truck 2-way Traffic	PM	0.7	0.3
GYP2WYALT	Gypsum Delivery by Truck	PM	0.8	0.4
GYPALT	Gypsum Delivery by Truck 2-way Traffic	PM	0.2	0.1
NCEM	2007 Cement Loadout Road	PM	0.7	2.1
RM	Raw Materials to Building	PM	0.2	0.2
RM2WY	Raw Materials to Building 2-way Traffic	PM	0.5	0.3
RM2WYALT	Raw Materials to Building Alternate Route	PM	0.7	0.4

RMALT	Raw Materials to Building 2-way Traffic Alternate Route	PM	0.2	0.2
SLWDFTIRES	SWDF, LWDF and Tires Delivery	PM	0.3	1.1

65. The permittee shall clean or treat haul roads in accordance with a haul road maintenance plan as found in Appendix H of this permit. This plan shall be designed to minimize emissions from this source. A copy of this plan shall be kept on site and made available to Department personnel upon request. [Regulation 18, §18.1004, Regulation 19, §19.705, 40 CFR 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Ash Grove Cement Company will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

Due to the significant power demands associated with cement kiln operations, the existing kilns and new pyroprocess system cannot operate at the same time. Prior to the new pyroprocess startup, all three existing kilns will be shut down. However, in the event that the new pyroprocess experiences significant problems during startup, the facility desires a transition period of one year during which either the existing kilns or the new kiln can be operated.

Prior to the startup of the new pyroprocess system, the facility will need to test various pieces of support equipment, including material handling conveyors, fans, motors, etc. The new finish mill may also be started up for troubleshooting if there is adequate power to do so. The majority of these tests will not result in pollutant emissions. Those that do generate emissions will be of short duration and only as necessary to assure support equipment readiness when the new pyroprocess begins operation. The facility has given a start-up date of July 31, 2009 for the pyroprocess system.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified, the CPT for the new pyroprocessing system as required by 40 CFR Part 63, Subpart EEE must be conducted within one year of startup. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

    a. Sampling ports adequate for applicable test methods;
    b. Safe sampling platforms;
    c. Safe access to sampling platforms; and
    d. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

7. The facility shall develop and implement a written startup, shutdown, and malfunction plan for sources subject to 40 CFR 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors*. The plan shall include

those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 and 40 CFR 63.6(e)(3)(i)]

8. The facility shall develop and implement a written startup, shutdown, and malfunction plan for sources subject to 40 CFR 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*. The plan shall include those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 and 40 CFR 63.6(e)(3)(i)]

9. The permittee shall not produce more than 5,300 tons of clinker per day. The permittee shall maintain records of the amount of clinker produced on a daily basis. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [Regulation 19, §19.705, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. On or before July 31, 2010, the permittee shall cease operation under the Three Kiln Configuration Operating Scenario and operate only those sources listed under the Pyroprocessing Operating Scenario of this permit. The permittee may test pieces of new equipment prior to this date provided that the permitted emission rates are not exceeded. Operation of sources not listed under the Pyroprocessing Operating Scenario after this date shall be considered a violation of this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Title VI Provisions

11. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

    a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
    b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
    c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
    d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

12. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

13. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

14. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

    The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

15. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

Permit Shield

16. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated August 31, 2006 and as amended November 22, 2006.

Applicable Regulations

Source No.	Regulation	Description
Plantwide	Arkansas Regulation 18	Arkansas Air Pollution Control Code
Plantwide	Arkansas Regulation 19	Compilation of Regulations of the Arkansas State Implementation Plan for Air Pollution Control
Plantwide	Arkansas Regulation 26	Regulations of the Arkansas Operating Air Permit Program
Plantwide	40 CFR Part 52.21	Regulations for the prevention of Significant Deterioration of Air Quality
41F.FT10 41F.FT11 40F.FT3 40F.FT4 40F.FT5 40F.FT6 40F.FT7 40F.FT8 40F.FT9 40F.FTA	40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984
443.BF10 443.BF30 443.SK10	40 CFR 63, Subpart EEE	Emission Standards for Hazardous Waste Combustors
41A.T10 44A.T10, 403.CHM 403.CHR, 403.CHU 403.T1, 403.T2 449.HP2, 449.T1 449.T2, 449.T3 449.T4, 533.LS10 502.CH3, 502.T1 502.T2, 514.BF1 514.BF2, 514.BF3 514.BF5, 524.BF1 524.BF2, 611.BF1 611.BF10, 611.BF2 611.BF20, 611.BF30 611.BF40, 403.BF3 403.BF4, 403.BF6 403.BF7, 403.BF8 612.BF1 612.BF2, 612.BF3 612.BF4, 612.BF5 612.BF6, 621.BF1	40 CFR 63, Subpart LLL	Emission Standards for Portland Cement Plants

Source No.	Regulation	Description
621.BF2, 621.BF3 621.BF5, 449.BF20 449.BF30, 449.BF40 440.BF46, 449.BF50 511.BF1, 521.BF1 521.BF2, 523.BF2 531.BF10, 531.BF20 533.BF10, 44B.BF30, 502.BF1 502.BF2, 449.BF10 327.BF30, 441.BF10 442.BF10		
41F.BF10 41F.FT10 41F.FT11 41F.TK10 41F.TX10 40F.FT3 40F.FT4 40F.FT5 40F.FT6 40F.FT7 40F.FT8 40F.FT9 40F.FTA 40F.TX1	40 CFR 61, Subpart FF	National Emission Standards for Benzene Waste Operations
41A.BF10 41A.BF20 41A.T2 41A.T10 44A.T10 44A.BF10 44B.BF10	40 CFR 60, Subpart Y	Standards of Performance for Coal Preparation Plants
41A.BF10 41A.BF20 44A.BF10 213.BF10 213.BF20 213.BF30 213.BF40 221.BF10 323.BF10	40 CFR 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants

Source No.	Regulation	Description
325.BF10 325.BF20 325.BF30 41A.T1 111.T10 111.T12 213.T1 221.CH01 221.RMB1 221.T1 321.CH01 323.T1		
41F.BF10 41F.FT10 41F.FT11 41F.TK10 41F.TX10 40F.FT3 40F.FT4 40F.FT5 40F.FT6 40F.FT7 40F.FT8 40F.FT9 40F.FTA 40F.TX1 RCC	40 CFR 61, Subpart DD	National Emission Standards for Hazardous Air Pollutants from Off-site Waste and Recovery Operations
710-EG10	40 CFR Part 60, Subpart IIII	New Source performance Standards for Stationary Compression Ignition Internal Combustion Engines

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated August 31, 2006 and as amended November 22, 2006.

Inapplicable Regulations

Source No.	Regulation	Description
Plantwide	40 CFR 60, Subpart F	Standards of Performance for Portland Cement Plants

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated September 1, 2006.

Description	Category
Piles Associated with Clean-up	A, 13
10,000 gallon oil tank	A,13
12,000 gallon oil tank	A, 13
10,000 gallon diesel UST	A, 3
10,000 gallon unleaded UST	A, 13
600 gallon tank	A, 3
250 gallon grinding aid tanks	A, 2
30,000 gallon grinding aid tank	A, 2
Masonry Air Entraining Agent Tank 10,000 gallon	A, 3
10,000 gallon diesel UST	A, 3
10,000 gallon diesel UST	A, 3
1,000 gallon UST	A, 3
(4) 550 gallon UST	A, 3
(2) 350 gallon used oil tanks	A, 3

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective September 26, 2002]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

    a. The date, place as defined in this permit, and time of sampling or measurements;
    b. The date(s) analyses performed;
    c. The company or entity performing the analyses;
    d. The analytical techniques or methods used;
    e. The results of such analyses; and
    f. The operating conditions existing at the time of sampling or measurement.

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample,

measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

    Arkansas Department of Environmental Quality
    Air Division
    ATTN: Compliance Inspector Supervisor
    Post Office Box 8913
    Little Rock, AR 72219

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

    a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:

        i. The facility name and location
        ii. The process unit or emission source deviating from the permit limit,
        iii. The permit limit, including the identification of pollutants, from which deviation occurs,
        iv. The date and time the deviation started,
        v. The duration of the deviation,
        vi. The average emissions during the deviation,
        vii. The probable cause of such deviations,
        viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
        ix. The name of the person submitting the report.

    The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The

permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director

along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]

    a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also

submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit;
e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit shall alter or affect the following: [Regulation 26, §26.704(C)]

a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
b. The liability of the permittee 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.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Three Kiln Configuration Operating Scenario

SECTION I: FACILITY INFORMATION

PERMITTEE:	Ash Grove Cement Company
AFIN:	41-00001
PERMIT NUMBER:	75-AOP-R7
FACILITY ADDRESS:	4457 Highway 108 Foreman, AR 71836
MAILING ADDRESS:	4457 Highway 108 Foreman, Arkansas 71836
COUNTY:	Little River
CONTACT POSITION:	Dan Peterson, Plant Manager
TELEPHONE NUMBER:	(870) 542-6217
REVIEWING ENGINEER:	Wesley Crouch
UTM North South (Y):	Zone 15: 3728.9
UTM East West (X):	Zone 15: 368.35

SECTION II: INTRODUCTION

Summary of Permit Activity

Ash Grove operates a portland cement plant located at 4457 Hwy 108 West in Foreman, Arkansas 71836. This modification will allow Ash Grove to replace an existing screw conveyor with a weigh belt (SN-M12) and add a conveyor belt to allow the addition of limestone to Mill No. 4 (SN-M46). This project will result in additional PM emissions of 0.5 tpy and PM_{10} emissions of 0.2 tpy.

Process Description

For informational purposes only, this section does not contain enforceable conditions.

Ash Grove Cement Company operates a portland cement plant near Foreman, Arkansas. The manufacture of portland cement at this facility is a five step process.

1. Acquisition of raw materials from nearby quarrying and crushing and from off-site sources.
2. Preparation of the raw materials for pyroprocessing by grinding with water into a slurry.
3. Pyroprocessing of the slurried raw materials into portland cement clinker.
4. Grinding of a mixture of clinker and gypsum into various portland cement products.
5. Cement storage and shipment of finished cement.

Raw materials consist of chalk, sand, and iron ore. Chalk is received by belt conveyor from the plant quarry and stock-piled in an A-framed structure. Sand and iron ore are received from off site and stored in separate outdoor piles. The chalk, sand, and iron ore are crushed and then transported to the mill building by a conveyor belt.

Within the mill building, the chalk, sand, and iron ore are stored in separate bins. These raw materials are proportioned, mixed with water in a ball mill and ground into a slurry. The slurry is pumped and metered into three rotary cement kilns in which chemical reactions occur to form clinker, an intermediate product that ultimately becomes portland cement.

From time-to-time, spent kiln brick removed from the rotary kilns is used to replace a portion of the raw materials fed to kiln #3. The spent brick is crushed in a portable crusher before being transferred to the mill building with other raw materials.

The raw material slurry is fed to the rotary kiln pyroprocessing system. The kilns are slowly-rotating steel tubes lined with various refractory materials (e.g. kiln brick). Each kiln slopes at an angle of about 5 degrees. The raw material slurry is fed to the kiln at the upper, or feed, end. Fuel generally is introduced at the lower, or burning, end of the kiln. The slope and rotation of the kiln allows the slurry to flow by gravity through the various reaction zones within the kiln.

Combustion gases and the slurry flow countercurrent to each other. Each kiln is equipped with an electrostatic precipitator to control particulate emissions.

Within the rotary kilns, the chemical constituents of the raw materials react with each other and are fused into nodules of portland cement clinker at a material temperature of about 2700 °F. The clinker exits at the burning end of the kiln and falls into clinker coolers in which the clinker is air cooled. A portion of this air is used for combustion air in the kilns. The balance of the air is vented to the atmosphere through a fabric filter.

After cooling, the clinker is transported by a series of conveyors to clinker storage silos. The clinker can also be transported by conveyor to an enclosed storage dome or by truck to an outside storage pile.

Clinker taken from storage is sent to finish milling. During finish milling, clinker is ground with gypsum and/or other additives to produce portland cement and masonry cement. Gypsum is delivered to the plant from off site sources and stored in an outdoor pile adjacent to the raw material storage areas. Gypsum is withdrawn from the pile by an underpile feeder which is located in a tunnel. The gypsum is transported to mill feed bins in the mill building. Chalk for masonry cement is dried in a rotary drier equipped with a wet scrubber control device.

Cement is pneumatically conveyed from the finish mills to several storage silos. From these silos, the cement is loaded into rail cars and trucks or packed into bags for shipment.

The fuel sources used to produce clinker at the Foreman plant include fossil fuels, including coal and natural gas, tire-derived fuel (TDF), hazardous waste-derived fuel (HWDF), and used oils from on and off site sources. These fuels are used in varying combinations and in varying percentages of the total fuel input.

Fuels are fed to the clinker discharge end of the kiln through a multichannel burner pipe. Containerized solid hazardous waste-derived fuel (SWDF) and TDF are fed directly into the calcining zone within the kilns. This location generally is midway between the feed end and burning end of the kiln.

The primary fossil fuel used to fire the kilns is coal. Coal is received from off-site sources and is stored in an outdoor storage pile.

TDF is received at the plant from off site sources. Tires may be fed to the kilns by hand or using automated equipment.

LWDF is received in rail tank cars and in tank trucks and stored in above ground storage tanks before being transferred to the kilns. Currently, Ash Grove operates three above ground LWDF storage tanks. In the near future, Ash Grove will operate seven above ground LWDF storage tanks. To control VOC emissions, the LWDF storage tanks are vented to a thermal oxidizer with a back up carbon adsorption system.

Containerized SWDF is received in van trailers and flat bed trailer trucks. Each individual container of SWDF is mechanically fed at the mid-kiln location.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective May 28, 2006
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002
40 CFR Part 60 Subpart F, *Standards of Performance for Portland Cement Plants,*
40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels(Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification commenced After July 23, 1984*
40 CFR Part 61, Subpart FF, *National Emission Standards for Benzene Waste Operations*
40 CFR Part 63, Subpart DD, *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*
40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*
40 CFR Part 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors*

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

Emission Summary (Three Kiln Scenario)

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	416.27	1112.85
		PM_{10}	135.87	563.25
		SO_2	2563.4	5736.1
		VOC	81.4	285.1
		CO	551.0	1214.9
		NO_X	3337.1	9097.0
HAPs*		1,1,1-trichloroethane*	0.03	0.05
		1,1,2,2-tetrachloroethane*	0.03	0.10
		1,1,2-trichloroethane*	0.03	0.11
		1,1-dichloroethane*	0.03	0.05
		1,1-dichloroethene*	0.33	1.40
		1,2,4-trichlorobenzene*	0.17	0.72
		1,2-dichloroethane*	1.69	7.42
		1,2-dichloropropene*	0.03	0.10
		1,2-epoxybutane*	0.09	0.32
		1,3-butadiene*	0.53	2.27
		1,4-dichlorobenzene*	0.39	1.63
		1,4-phenylene-diamine*	0.08	0.32
		2,4,5-trichlorophenol*	0.03	0.08
		2,4,6-trichlorophenol*	0.19	0.86
		2,4-dinitrophenol*	0.07	0.25
		2,4-dinitrotoluene*	0.014	0.03
		2-butanone*	0.62	2.69
		3,3-dichlorobenzidine*	0.03	0.09
		3,3-dimethoxybenzidine*	0.03	0.1
		4-methyl-2-pentanone*	0.03	0.21
		4-nitrophenol*	0.05	0.17
		acrylonitrile*	0.09	0.40
		allyl chloride*	0.53	2.34
		aniline*	0.02	0.06
		antimony	30.5	57.37
		arsenic	0.00566	0.02459
		benzene*	0.81	3.56
		benzidine*	0.05	0.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		beryllium	0.00063	0.002734
		bis(2-chloroethyl)ether*	0.03	0.08
		bis(2-ethylhexyl)phthalate*	0.748	3.28
		bromodichloromethane*	0.04	0.13
		bromoform*	0.03	0.12
		bromomethane*	0.78	3.43
		cadmium	0.06513	0.2843
		carbon disulfide	0.17	0.75
		carbon tetrachloride*	0.03	0.06
		chlorine	1.3432	5.8656
		chlorobenzene*	0.35	1.52
		chloroethane*	2.11	9.19
		chloroform*	0.24	1.07
		chloromethane*	2.19	9.55
		chromium	0.01559	0.0683
		cis-1,3-dichloropropene*	0.03	0.18
		cobalt‡	66.0	289.12
		cumene*	0.03	0.10
		diethanolamine*	1.1	4.6
		dimethylphthalate*	0.014	0.03
		ethyl acrylate*	0.35	1.5
		ethylbenzene*	0.21	0.87
		ethylene dibromide*	0.03	0.04
		ethylene glycol*	0.35	1.6
		hexachlorobenzene*	0.03	0.05
		hexachlorobutadiene*	0.03	0.09
		hexachlorocyclopentadiene*	0.03	0.08
		hexachloroethane*	0.03	0.1
		hydrogen chloride	171	749.0
		hydroquinone*	0.04	0.17
		iodomethane*	0.07	0.29
		lead	1.42	.9640
		manganese	0.1462	0.64
		mercury	0.2147	0.94
		methyl methacrylate*	0.03	0.15
		methylene chloride*	4.72	20.63
		naphthalene*	0.96	4.26
		n-hexane*	0.19	0.87
		nickel	66.0	289.12
		nitrobenzene*	0.03	0.11

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		N-nitrosoddiphenylamine*	0.016	0.03
		N-nitrosomorpholine*	0.03	0.13
		ortho-anisidine*	0.03	0.11
		ortho-toluidine*	0.018	0.05
		o-xylene*	0.36	1.56
		pentachlorophenol*	0.05	0.15
		phenol*	0.19	0.82
		selenium	0.0255	0.1118
		styrene*	0.07	0.26
		tert-butyl methyl ether*	0.03	0.05
		tetrachloroethene*	0.03	0.16
		toluene*	0.16	0.76
		trans-1,3-dichloropropene*	0.03	0.12
		trichloroethene*	0.13	0.59
		vinyl acetate*	0.03	0.06
		vinyl bromide*	0.13	0.61
		vinyl chloride*	0.89	3.83
		xylene*	1.45	3.83
Air Contaminants **		None		
P1	Kiln #1	PM	19.5	85.4
		PM_{10}	19.5	85.4
		SO_2	849.0	1960.0
		VOC	9.6	42.1
		CO	172.0	368.0
		NO_x	889.0	2400.0
		1,1,1-trichloroethane	0.01	0.02
		1,1,2,2-tetrachloroethane	0.01	0.03
		1,1,2-trichloroethane	0.01	0.04
		1,1-dichloroethane	0.01	0.02
		1,1-dichloroethene	0.16	0.69
		1,2,4-trichlorobenzene	0.08	0.35
		1,2-dichloroethane	0.01	0.05
		1,2-dichloropropane	0.01	0.04
		1,2-epoxybutane	0.01	0.01
		1,3-butadiene	0.02	0.07
		1,4-dichlorobenzene	0.19	0.81
		1,4-phenylene-diamine	0.01	0.03
		2,4,5-trichlorophenol	0.01	0.03
		2,4,6-trichlorophenol	0.01	0.05

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		2,4-dinitrophenol	0.03	0.11
		2,4-dinitrotoluene	0.002	0.01
		2-butanone	0.21	0.91
		3,3-dichlorobenzidine	0.01	0.04
		3,3-dimethoxybenzidine	0.01	0.04
		4-methyl-2-pentanone	0.01	0.09
		4-nitrophenol	0.02	0.07
		acrylonitrile	0.03	0.11
		allyl chloride	0.19	0.84
		aniline	0.005	0.02
		antimony	8.8	38.5
		arsenic	0.00258	0.0112
		benzene	0.22	0.95
		benzidine	0.02	0.07
		beryllium	0.00028	0.00123
		bis(2-chloroethyl)ether	0.01	0.03
		bis(2-ethylhexyl)phthalate	0.004	0.02
		bromodichloromethane	0.01	0.02
		bromoform	0.01	0.03
		bromomethane	0.26	1.15
		cadmium	0.0307	0.134
		carbon disulfide	0.08	0.37
		carbon tetrachloride	0.01	0.02
		chlorine	0.0016	0.0078
		chlorobenzene	0.17	0.73
		chloroethane	1.05	4.59
		chloroform	0.01	0.06
		chloromethane	0.12	0.51
		chromium	0.00578	0.0253
		cis-1,3-dichloropropene	0.02	0.08
		cobalt[‡]	19.5	85.41
		cumene	0.01	0.03
		dimethylphthalate	0.002	0.01
		ethyl acrylate	0.11	0.46
		ethyl benzene	0.1	0.41
		ethylene dibromide	0.01	0.01
		hexachlorobenzene	0.01	0.02
		hexachlorobutadiene	0.01	0.03
		hexachlorocyclopentadiene	0.01	0.03
		hexachloroethane	0.01	0.04

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		hydrogen chloride	50.0	219.0
		hydroquinone	0.01	0.05
		iodomethane	0.03	0.13
		lead	0.06	0.263
		manganese	0.043	0.188
		mercury	0.0694	0.304
		methyl methacrylate	0.01	0.05
		methylene chloride	2.24	9.8
		naphthalene	0.29	1.29
		n-hexane	0.06	0.27
		nickel‡	19.5	85.41
		nitrobezene	19.5	0.02
		N-nitrosoddiphenylamine	0.003	0.01
		n-nitrosomorpholine	0.01	0.04
		ortho-aniside	0.01	0.04
		ortho-toluidine	0.004	0.02
		o-xylene	0.08	0.35
		pentachlorophenol	0.02	0.07
		phenol	0.05	0.22
		selenium	0.0075	0.0329
		styrene	0.03	0.12
		tert-butyl methyl ether	0.01	0.02
		tetrachloroethene	0.02	0.07
		toluene	0.04	0.19
		trans-1,3-dichloropropene	0.01	0.05
		trichloroethene	0.06	0.28
		vinyl acetate	0.01	0.02
		vinyl bromide	0.01	0.06
		vinyl chloride	0.44	1.91
		m/p xylene	0.21	0.92
P2	Kiln #2	PM	19.5	85.4
		PM_{10}	19.5	85.4
		SO_2	753.0	1690.0
		VOC	9.6	42.1
		CO	152.0	333.0
		NO_x	882.0	2453.0
		1,1,1-trichloroethane	0.01	0.02
		1,1,2,2-tetrachloroethane	0.01	0.03
		1,1,2-trichloroethane	0.01	0.04
		1,1-dichloroethane	0.01	0.02

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		1,1-dichloroethene	0.16	0.69
		1,2,4-trichlorobenzene	0.08	0.35
		1,2-dichloroethane	0.01	0.05
		1,2-dichloropropane	0.01	0.04
		1,2-epoxybutane	0.01	0.01
		1,3-butadiene	0.02	0.07
		1,4-dichlorobenzene	0.19	0.81
		1,4-phenylene-diamine	0.01	0.03
		2,4,5-trichlorophenol	0.01	0.03
		2,4,6-trichlorophenol	0.01	0.05
		2,4-dinitrophenol	0.03	0.11
		2,4-dinitrotoluene	0.002	0.01
		2-butanone	0.21	0.91
		3,3-dichlorobenzidine	0.01	0.04
		3,3-dimethoxybenzidine	0.01	0.04
		4-methyl-2-pentanone	0.01	0.09
		4-nitrophenol	0.02	0.07
		acrylonitrile	0.03	0.11
		allyl chloride	0.19	0.84
		aniline	0.005	0.02
		antimony	8.80	38.5
		arsenic	0.00258	0.0112
		benzene	0.22	0.95
		benzidine	0.02	0.07
		beryllium	0.00028	0.00123
		bis(2-chloroethyl)ether	0.01	0.03
		bis(2-ethylhexyl)phthalate	0.004	0.02
		bromodichloromethane	0.01	0.02
		bromoform	0.01	0.03
		bromomethane	0.26	1.15
		cadmium	0.0307	0.134
		carbon disulfide	0.08	0.37
		carbon tetrachloride	0.01	0.02
		chlorine	0.0016	0.0078
		chlorobenzene	0.17	0.73
		chloroethane	1.05	4.59
		chloroform	0.01	0.06
		chloromethane	0.12	0.51
		chromium	0.00578	0.0253
		cis-1,3-dichloropropene	0.02	0.08

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		cobalt‡	19.5	85.41
		cumene	0.01	0.03
		dimethylphthalate	0.002	0.01
		ethyl acrylate	0.11	0.46
		ethyl benzene - listed twice	0.09	0.38
		ethyl benzene - listed twice	0.01	0.03
		ethylene dibromide	0.01	0.01
		hexachlorobenzene	0.01	0.02
		hexachlorobutadiene	0.01	0.03
		hexachlorocyclopentadiene	0.01	0.03
		hexachloroethane	0.01	0.04
		hydrogen chloride	50	219.0
		hydroquinone	0.01	0.05
		iodomethane	0.03	0.13
		lead	0.06	0.263
		manganese	0.043	0.188
		mercury	0.0694	0.304
		methyl methacrylate	0.01	0.05
		methylene chloride	2.24	9.8
		naphthalene	0.29	1.29
		n-hexane	0.06	0.27
		nickel‡	19.50	85.41
		nitrobezene	0.005	0.02
		N-nitrosoddiphenylamine	0.003	0.01
		n-nitrosomorpholine	0.01	0.04
		ortho-aniside	0.01	0.04
		ortho-toluidine	0.004	0.02
		o-xylene	0.08	0.35
		pentachlorophenol	0.02	0.07
		phenol	0.05	0.22
		selenium	0.0075	0.0329
		Silver - in Application		
		styrene	0.03	0.12
		tert-butyl methyl ether	0.01	0.02
		tetrachloroethene	0.01	0.07
		toluene	0.01	0.19
		trans-1,3-dichloropropene	0.01	0.05
		trichloroethene	0.06	0.28
		vinyl acetate	0.01	0.02
		vinyl bromide	0.01	0.06

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		vinyl chloride	0.44	1.91
		m/p xylene	0.21	0.92
P3	Kiln #3	PM	27.0	118.3
		PM_{10}	27.0	118.3
		SO_2	961.0	2090.0
		VOC	13.4	58.87
		CO	220.0	482.0
		NO_x	1568.0	4230.0
		1,1,1-trichloroethane	0.01	0.01
		1,1,2,2-tetrachloroethane	0.01	0.04
		1,1,2-trichloroethane	0.01	0.03
		1,1-dichloroethane	0.01	0.01
		1,1-dichloroethene	0.01	0.02
		1,2,4-trichlorobenzene	0.01	0.02
		1,2-dichloroethane	1.67	7.32
		1,2-dichloropropane	0.01	0.02
		1,2-epoxybutane	0.07	0.3
		1,3-butadiene	0.49	2.13
		(cis/trans)1,3-dichloropropene	0.01	0.02
		1,4-dichlorobenzene	0.01	0.01
		1,4-phenylene-diamine	0.06	0.26
		2,4,5-trichlorophenol	0.01	0.02
		2,4,6-trichlorophenol	0.17	0.76
		2,4-dinitrophenol	0.01	0.03
		2,4-dinitrotoluene	0.01	0.01
		2-butanone	0.20	0.87
		3,3-dichlorobenzidine	0.01	0.01
		3,3-dimethoxybenzidine	0.01	0.02
		4-dinitrophenol	0.01	0.03
		4-methyl-2-pentanone	0.01	0.03
		acrylonitrile	0.03	0.14
		allyl chloride	0.15	0.66
		aniline	0.01	0.02
		antimony	12.9	56.6
		arsenic	0.0005	0.00219
		benzene	0.37	1.63
		benzidine	0.02	0.07
		beryllium	0.00007	0.000274
		bis(2-chloroethyl)ether	0.01	0.02

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		bis(2-ethylhexyl)phthlate	0.74	3.24
		bromodichloromethane	0.02	0.09
		bromoform	0.01	0.06
		bromomethane	0.26	1.13
		cadmium	0.00373	0.0163
		carbon disulfide	0.01	0.01
		carbon tetrachloride	0.01	0.02
		chlorine	1.34	5.85
		chlorobenzene	0.01	0.06
		chloroethane	0.01	0.01
		chloroform	0.22	0.95
		chloromethane	1.95	8.53
		chromium	0.00403	0.0177
		cobalt‡	27.0	118.3
		cumene	0.01	0.04
		dimethylphthalate	0.01	0.01
		ethyl acrylate	0.13	0.58
		ethylbenzene	0.01	0.05
		ethylene dibromide	0.01	0.02
		hexachlorobenzene	0.01	0.01
		hexachlorobutadiene	0.01	0.03
		hexachlorocyclopentadiene	0.01	0.02
		hexachloroethane	0.01	0.02
		hydrogen chloride	71.0	311.0
		hydroquinone	0.02	0.07
		iodomethane	0.01	0.03
		lead	0.10	0.438
		m/p xylene	0.43	1.89
		manganese	0.0602	0.264
		mercury	0.0759	0.332
		methyl methacrylate	0.01	0.05
		methylene chloride	0.24	1.03
		naphthalene	0.38	1.68
		n-hexane	0.07	0.33
		nickel‡	27.0	118.3
		nitrobenzene	0.02	0.07
		N-nitrosoddiphenylamine	0.01	0.01
		N-nitrosomorpholine	0.01	0.05
		ortho-anisidine	0.01	0.03
		ortho-toluidine	0.01	0.01

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		o-xylene	0.20	0.86
		pentachlorophenol	0.01	0.01
		phenol	0.09	0.38
		selenium	0.0105	0.046
		Silver - In Application		
		styrene	0.01	0.02
		tert-butyl methyl ether	0.01	0.01
		tetrachloroethene	0.01	0.02
		toluene	0.04	0.18
		trichloroethene	0.01	0.03
		vinyl acetate	0.01	0.02
		vinyl bromide	0.11	0.49
		vinyl chloride	0.03	0.14
		4-Nitrophenol	0.01	0.03
P4	Discharge into Coal Mill #1	PM	0.1	0.2
		PM_{10}	0.1	0.1
P5	Discharge from Kiln #1 to #1 Bucket Conveyor	PM	0.2	0.8
		PM_{10}	0.1	0.3
P6	3 Clinker Cooler Baghouse	PM	25.0	110.0
		PM_{10}	25.0	110.0
P7	Discharge into Coal Mill #2	PM	0.1	0.1
		PM_{10}	0.1	0.1
P8	Discharge from Kiln #2 to #2 Bucket Conveyor	PM	0.2	0.8
		PM_{10}	0.1	0.3
P9	Discharge into Coal Mill #3	PM	0.1	0.1
		PM_{10}	0.1	0.1
P10	Discharge from Kiln #3 to #3 Bucket Conveyor	PM	0.6	2.3
		PM_{10}	0.2	0.8
P11	Discharge from Bin #48	PM	0.1	0.1
		PM_{10}	0.1	0.1
P12	Discharge from Bin #48	PM	0.1	0.1
		PM_{10}	0.1	0.1
P13	Discharge from Bin #47	PM	0.1	0.1
		PM_{10}	0.1	0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
P15	Baghouse Discharge to #2 Bucket Conveyor	PM PM_{10}	0.4 0.2	1.6 0.6
P16	Baghouse Discharge to #3 Bucket Conveyor	PM PM_{10}	0.4 0.2	1.6 0.6
P17	Bin #49 Sock Filter	PM PM_{10}	0.5 0.5	1.9 1.9
P20	Truck Loading of CKD	PM PM_{10}	0.1 0.1	0.2 0.1
P21	Truck Unloading of CKD	PM PM_{10}	0.1 0.1	0.2 0.1
P22	Trailer Unloading of CKD	PM PM_{10}	0.1 0.1	0.2 0.1
P23	CKD Pile	PM PM_{10}	1.2 0.6	5.2 2.6
P24	Transfer from Main Coal Pile	PM PM_{10}	0.2 0.1	0.6 0.2
P32	1500 Ton CKD Storage Bin	PM PM_{10}	0.4 0.4	1.6 1.6
P33	CKD Handling Screw Conveyor Bin Vent	PM PM_{10}	0.1 0.1	0.4 0.4
P34	Kiln #3 Dust Scoop Bin Vent	PM PM_{10}	0.2 0.2	0.5 0.5
P35 P39	CKD Handling 500 Ton Silo Baghouse	PM PM_{10}	0.3 0.3	1.1 1.1
P36	Truck Loading of CKD (North of Hwy. 108)	PM PM_{10}	0.1 0.1	0.3 0.1
P37	1500 ton CKD Storage Bin	PM PM_{10}	0.3 0.3	1.2 1.2
P38	CKD Truck Loadout	PM PM_{10}	0.2 0.2	0.6 0.6
M3	Gypsum Discharge into Finish Mill #4	PM PM_{10}	0.1 0.1	0.1 0.1
M4	Gypsum Discharge to Gypsum Elevator	PM PM_{10}	0.1 0.1	0.1 0.1
M9	Tripper Discharge into Bins	PM PM_{10}	0.1 0.1	0.2 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
M10	Discharge from Bin #45	PM PM_{10}	0.1 0.1	0.1 0.1
M11	Discharge into Bin #43	PM PM_{10}	0.3 0.1	1.0 0.4
M12	Discharge from Bin #44	PM PM_{10}	0.1 0.1	0.4 0.2
M13	Discharge from Bin #43	PM PM_{10}	0.3 0.1	1.0 0.4
M14	Transfer from Admix Weigh Feeder to B Belt	PM PM_{10}	0.3 0.1	1.0 0.4
M15	Transfer from Bin #42 Feeder to B Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M16	#2 Finish Mill Baghouse	PM PM_{10}	0.7 0.7	3.0 3.0
M17	#2 Finish Mill Baghouse-Mill Sweep	PM PM_{10} VOC Diethanolamine Ethylene Glycol	0.5 0.5 3.8 0.2 0.1	2.0 2.0 16.3 0.6 0.2
M18	#4 Finish Mill Baghouse	PM PM_{10}	1.1 1.1	4.7 4.7
M19	#4 Finish Mill Discharge Baghouse-Mill Sweep	PM PM_{10} VOC Diethanolamine Ethylene Glycol	1.6 1.6 27.8 1.0 0.4	6.7 6.7 122.0 4.1 1.4
M20	Dryer Scrubber	PM PM_{10} SO_2 VOC CO NO_x	0.4 0.2 0.1 0.5 6.3 7.5	1.8 0.9 0.2 1.9 27.6 32.9
M21	Discharge from Bin #42 to Feeder	PM PM_{10}	0.1 0.1	0.1 0.1
M22	Discharge from Bin #41	PM PM_{10}	0.1 0.1	0.1 0.1
M23	Transfer from Bin #41 Conveyor Belt to A1	PM PM_{10}	0.1 0.1	0.1 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Conveyor Belt			
M24	Discharge from Bin #40	PM PM_{10}	0.1 0.1	0.1 0.1
M25	Discharge from D Belt into Chalk Dryer	PM PM_{10}	0.2 0.1	0.6 0.2
M26	Transfer to D Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M27	Discharge from Bin #39	PM PM_{10}	0.1 0.1	0.4 0.2
M28	Transfer to Dry Feed Belt	PM PM_{10}	0.1 0.1	0.4 0.2
M29	Transfer to Dry Feed Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M30	Transfer from #1 Clinker Bin to Dry Feed Belt	PM PM_{10}	0.4 0.2	1.6 0.6
M31	Discharge from Bin #38	PM PM_{10}	0.1 0.1	0.1 0.1
M32	Discharge from Bin #38	PM PM_{10}	0.1 0.1	0.1 0.1
M33	Discharge from Bin #37	PM PM_{10}	0.1 0.1	0.1 0.1
M34	Transfer from Bin #37 to A1 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M35	Discharge from Bin #36	PM PM_{10}	0.1 0.1	0.1 0.1
M36	Transfer to A1 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M37	Transfer to A1 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M38	Transfer to A1 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
M39	Discharge Into Raw Mill #3	PM PM_{10}	0.2 0.1	0.5 0.2
M40	Discharge from Gypsum Elevator into Feed Mill #4	PM PM_{10}	0.1 0.1	0.1 0.1

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
M42	Bin #36 Dust Collector	PM PM_{10}	0.3 0.3	0.9 0.9
M43	Bin #37 Dust Collector	PM PM_{10}	0.3 0.3	0.9 0.9
M44	Bin #39 Dust Collector	PM PM_{10}	0.3 0.3	0.9 0.9
M45	Bin #44 Dust Collector	PM PM_{10}	0.3 0.3	0.9 0.9
M46	Transfer from Limestone Feeder to Belt Conveyor	PM PM_{10}	0.2 0.1	0.5 0.2
F4	Long Term Coal Pile	PM PM_{10}	0.2 0.1	0.9 0.5
F5	Active Coal Pile	PM PM_{10}	0.2 0.1	0.6 0.3
F6	Discharge into Feed Hopper #5	PM PM_{10}	0.6 0.3	1.7 0.6
F8	Transfer from #208 Belt to #210 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
F9	Discharge into Feed Hopper #4	PM PM_{10}	0.6 0.3	1.7 0.6
F11	Discharge from Hopper #4 Vibrating Feeder to #206 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
F12	Discharge from Hopper #5 Vibrating Feeder to #206 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
F13	Transfer from #206 Belt to #208 Belt	PM PM_{10}	0.1 0.1	0.1 0.1
F14	Transfer from Stacker Belt to Active Coal Pile	PM PM_{10}	0.6 0.3	1.7 0.6
F15	Unloading into Long Term Coal Pile	PM PM_{10}	0.5 0.2	1.2 0.5
F16	Transfer from Long Term Coal Pile to Active Pile	PM PM_{10}	0.5 0.2	1.2 0.5
F17	Transfer from Coal	PM	0.2	0.6

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Feeders to Underbelt	PM_{10}	0.1	0.2
F18	Railcar Unloading into Coal Hoppers 4 and 5	PM PM_{10}	0.6 0.3	2.7 1.0
F19, F20	LWDF Tanks Thermal Oxidizer and Carbon Adsorption System	PM PM_{10} SO_2 VOC CO NO_x Xylene Toluene Methylene Chloride Ethyl Benzene Styrene Tetrachloroethane 1,1,2-trichloroethane Benzene	0.1 0.1 0.1 16.9 0.5 0.6 1.3 0.7 0.1 0.2 0.1 0.1 0.1 0.1	0.2 0.2 0.1 3.0 2.0 2.4 0.3 0.2 0.1 0.1 0.1 0.1 0.1 0.1
S1	Truck Loadout DC #31	PM PM_{10}	0.2 0.2	0.8 0.8
S3	Truck Loadout DC #49	PM PM_{10}	0.7 0.7	3.0 3.0
S4	Kaiser Silos DC #21	PM PM_{10}	0.5 0.5	2.1 2.1
S5	Kaiser Silos DC #22	PM PM_{10}	0.2 0.2	0.7 0.7
S6	Delta Silo DC #23	PM PM_{10}	0.6 0.6	2.5 2.5
S7	Rail Silos DC #24	PM PM_{10}	0.7 0.7	3.0 3.0
S8	Kaiser Silos DC #29	PM PM_{10}	0.2 0.2	0.8 0.8
S9	Kaiser Silos DC #30	PM PM_{10}	0.2 0.2	0.7 0.7
S10	Rail Silos DC #25	PM PM_{10}	0.3 0.3	1.0 1.0
S11	Packer DC #26	PM PM_{10}	0.7 0.7	3.0 3.0

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
S12	Packer DC #27	PM PM_{10}	0.6 0.6	2.5 2.5
S13	Truck Loadout DC #28	PM PM_{10}	0.5 0.5	2.0 2.0
S14	Bins 26 and 27 Dust Collector	PM PM_{10}	1.1 1.1	4.5 4.5
S15	Rail Load Out Dust Collector	PM PM_{10}	0.3 0.3	1.0 1.0
C1	Clinker Transfer Tower Baghouse	PM PM_{10}	1.8 1.8	7.6 7.6
C2	Outside Clinker Truck Unloading	PM PM_{10}	1.3 0.5	5.4 1.9
C3	Outside Clinker Reclaim Hopper Loading	PM PM_{10}	0.6 0.2	2.3 0.8
C4	Outside Clinker Storage Pile	PM PM_{10}	0.1 0.1	0.3 0.2
C5	Discharge from Clinker Reclaim Hopper	PM PM_{10}	0.6 0.2	2.3 0.8
C6	Clinker Railcar and Truck Hopper Loading	PM PM_{10}	0.2 0.1	0.8 0.3
C7	Clinker Discharge to Railcar/Truck	PM PM_{10}	0.2 0.1	0.8 0.3
C8	Transfer from Reclaim Belt to #7 Belt	PM PM_{10}	0.6 0.2	2.3 0.8
C9	Transfer to #7 Belt	PM PM_{10}	0.2 0.1	0.6 0.2
C10	Transfer from #7 Belt to #8 Belt	PM PM_{10}	0.7 0.3	2.8 1.0
C11	Transfer from #8 Belt to #9 Belt	PM PM_{10}	0.9 0.3	3.6 1.3
C14	B Belt Dust Collector	PM PM_{10}	0.1 0.1	0.4 0.4
C15	Discharge from #2 Clinker Bin to B Belt	PM PM_{10}	0.1 0.1	0.4 0.2
C16	Discharge into #2	PM	0.9	3.6

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
	Clinker Bin	PM_{10}	0.3	1.3
C17	Transfer from #9 Belt	PM PM_{10}	0.9 0.3	3.6 1.3
C18	Clinker Dust Elevator Collector	PM PM_{10}	0.1 0.1	0.4 0.4
C19	Discharge from #1 Clinker Bin	PM PM_{10}	0.1 0.1	0.4 0.2
C20	Transfer to Belt Conveyor	PM PM_{10}	0.1 0.1	0.4 0.2
C21	Discharge into #1 Clinker Bin	PM PM_{10}	0.1 0.1	0.4 0.4
C26	West Clinker Silo Dust Collector	PM PM_{10}	0.8 0.8	3.2 3.2
C27	4A2 Belt Dust Collector	PM PM_{10}	0.6 0.6	2.7 2.7
C28	Transfer to 4A Belt	PM PM_{10}	0.2 0.1	0.7 0.3
C32	East Clinker Silo Dust Collector	PM PM_{10}	0.8 0.8	3.2 3.2
C34	West Clinker Tank Dust Collector	PM PM_{10}	0.2 0.2	0.8 0.8
C36	Discharge into Clinker Elevator	PM PM_{10}	1.7 0.6	7.4 2.6
C37	Discharge into Clinker Elevator	PM PM_{10}	0.2 0.1	0.5 0.2
C41	Off-SPEC Bin and Ancillary Equipment Dust Collector	PM PM_{10}	0.4 0.4	1.4 1.4
C42	Clinker Dome Dust Collector	PM PM_{10}	0.6 0.6	1.9 1.9
C43	Reclaim Belt Dust Collector	PM PM_{10}	0.2 0.2	0.5 0.5
C44	Off-Spec Bin Dust Collector	PM PM_{10}	0.17 0.17	0.75 0.75
C45	Clinker Silo Baghouse	PM PM_{10}	0.3 0.3	1.2 1.2
C46	Clinker Silo Baghouse	PM PM_{10}	0.3 0.3	1.2 1.2

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
R1	Truck Unloading for Sand/Iron Ore	PM PM_{10}	1.9 0.7	8.0 2.8
R2	Chalk Storage Pile	PM PM_{10}	0.1 0.1	0.3 0.2
R3	Discharge from Chalk Feeder	PM PM_{10}	0.1 0.1	0.2 0.1
R4	Discharge from Gypsum Feeder	PM PM_{10}	0.3 0.1	1.0 0.4
R5	Gypsum Storage Pile	PM PM_{10}	0.1 0.1	0.1 0.1
R6	Discharge from Sand/Iron-ore Feeder	PM PM_{10}	0.1 0.1	0.1 0.1
R8	Sand/Iron Ore Storage Transfer	PM PM_{10}	0.4 0.2	1.5 0.5
R9	Discharge from Emergency Feeder	PM PM_{10}	0.3 0.1	1.0 0.4
R10	Discharge of Gypsum Belt	PM PM_{10}	0.8 0.3	3.2 1.2
R11	Discharge into Secondary Crusher	PM PM_{10}	0.1 0.1	0.2 0.1
R12	Secondary Crusher	PM PM_{10}	0.2 0.2	0.8 0.8
R13	Secondary Crusher Discharge	PM PM_{10}	0.1 0.1	0.2 0.1
R14	Transfer to #2 Belt	PM PM_{10}	0.1 0.1	0.2 0.1
R15	Discharge from Gypsum Hopper	PM PM_{10}	0.1 0.1	0.2 0.1
R16	Gypsum Truck Discharge into Hopper	PM PM_{10}	0.8 0.3	3.2 1.2
R17	Long Term Sand Pile	PM PM_{10}	0.1 0.1	0.4 0.2
R18	Iron Ore Storage Pile	PM PM_{10}	0.2 0.1	0.6 0.3
R19	Sand Storage Pile	PM PM_{10}	0.1 0.1	0.1 0.1
R20	Emissions from Haul Roads	PM PM_{10}	13.1 3.6	47.2 13.4

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
R22	Portable Crusher	PM PM_{10} SO_2 VOC CO NO_x	0.3 0.3 0.2 0.2 0.6 2.5	1.3 1.0 0.8 0.9 2.3 10.6
R24	Transfer from Portable Crusher to Main Conveyor	PM PM_{10}	0.3 0.2	1.3 0.5
R25	Emergency Gypsum Storage Pile	PM PM_{10}	0.1 0.1	0.1 0.1
Q1	Quarry Haul Road	PM PM_{10}	23.5 5.133	102.8 22.5
Q2	Primary Crusher	PM PM_{10}	0.5 0.5	1.9 1.9
Q3	Quarry Belt Turning Point Transfer from 2N to 1N	PM PM_{10}	0.1 0.1	0.4 0.4
Q4	Transfer from Belt 1N to Tripper Belt	PM PM_{10}	0.1 0.1	0.4 0.4
Q5	Discharge of Tripper Belt to Chalk Storage	PM PM_{10}	0.1 0.1	0.4 0.4
Q6	Scraper Dumping to Auxiliary System	PM PM_{10}	0.1 0.1	0.2 0.2
Q7	Hopper 3 Discharge to 1.12 Belt (Auxiliary System)	PM PM_{10}	0.1 0.1	0.2 0.2
Q8	Auxiliary Crusher	PM PM_{10}	1.1 0.5	4.7 2.2
Q9	Discharge of Belt 1 to Tripper Belt	PM PM_{10}	0.1 0.1	0.2 0.2

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated.

**Air Contaminants such as ammonia, acetone, and certain halogenated solvents are not VOCs or HAPs.

‡ While it is assumed that these metals are indeed emitted, as they are naturally occurring metals present in the raw materials used to manufacture cement, Ash Grove was not able to calculate an emission rate. Ash Grove requests the use of the particulate matter emission rate of 19.5 lb/hr

and 85.41 tpy for Kiln 1 and 2, 27.0 lb/hr and 118.3 tpy for Kiln 3, as stated in the HWC NESHAP (September 29, 1999, 64 FR 52879) preamble be incorporated as limits for nickel and cobalt.

SECTION III: PERMIT HISTORY

Permit #75-A was issued to Arkansas Cement Corporation Foreman Production facilities on or about September 21, 1971. This permit allowed the installation of three "Precipitair" electrostatic precipitators and supporting equipment at the existing facility. Proposed emissions were 29.58 lb/hr of particulates.

Permit #75-A (modification) allowed the facility to use coal instead of natural gas as the primary fuel to fire the three cement kilns and to replace the three previously approved electrostatic precipitators. This amendment was issued on September 15, 1976.

Permit #75-A (modification) was issued on March 26, 1982. This modification allowed Arkansas Cement to install a gravel bed filter to control particulate discharge from the clinker coolers to replace the multiclone that was being used. Permitted emission rates dropped from 475 lb/hr to 25 lb/hr of particulate.

Permit #75-AR-3 was issued on May 27, 1983, and it rescinded the modification issued on March 26, 1982, because the facility decided to install a Fuller fabric filter with heat recovery instead of the gravel bed filter. This modification also included the replacement of part of the clinker handling system and the installation of a baghouse to control emissions generated at this crossover point. This modification added 1 lb/hr of particulate emissions.

Permit #75-AR-4 was issued on January 29, 1988. This modification changed the name of the facility to Ash Grove Cement Company and consolidated the existing emissions sources into one permit and placed restrictions on the use of waste-derived fuel at this facility. This permit allowed emissions of 99.9 lb/hr of TSP, 787 lb/hr of SO_2, 39 lb/hr of chlorine, 0.048 lb/hr of lead, and 0.006 lb/hr of chromium.

Permit #75-AR-5 was issued on June 30, 1989. This permit allowed Ash Grove to burn solid hazardous waste in the cement kilns. This permit allowed emissions of 92.2 lb/hr TSP, 1574 lb/hr of SO_2, 164.6 lb/hr of HCl, 0.22 lb/hr of lead, and 0.316 lb/hr of chromium.

Permit #75-AR-6 was issued on July 8, 1991. This permit allowed Ash Grove to change the outlet nozzles of the ESPs so that each kiln could vent to a single stack. Emissions were not increased due to this modification.

Permit #75-AR-7 was issued on November 13, 1991. This modification allowed all sources, regardless of size, to be permitted. No changes in operation were made. Emissions consisted of 553 tpy TSP, 6,894.1 tpy SO_2, 721 tpy HCl, 0.964 tpy lead, and 1.39 tpy chromium.

Permit #75-AR-8 was issued on June 15, 1994. This permit covered the installation of CEMS required by the BIF rule. Permit #75-AR-7 was modified so that the Air Permit monitoring requirements for SO_2, NO_x, and CO could be satisfied by the new CEMS. This modification also added two product storage silos and related materials handling equipment to improve the loading and shipping of finished product, and modified four existing dust control baghouses in a manner

that resulted in four new point discharge stacks. The carbon adsorption system on the liquid waste fuel storage tanks was replaced by a liquid nitrogen recovery condenser. These changes did not result in any changes to the emission rates at this facility.

Permit #75-AR-9 was issued on February 11, 1998. This modification authorized Ash Grove to burn waste tires as fuel. Emission rates for SO_2 were increased and emission rates for NO_x and CO were added. Emission totals listed in this permit were 567 tpy PM_{10}, 5,740 tpy SO_2, 1,183 tpy CO, 9,080 tpy NO_x, 0.964 tpy lead, and 3.0 tpy VOC.

Permit 1235-AR-1 was issued on November 7, 1995. This permit is for the limestone quarry located at the Ash Grove site. The requirements for this quarry are being incorporated into this permit. The quarry is permitted to emit 4.3 lb/hr and 19.0 tpy of PM/PM_{10}.

Permit 75-AOP-R0 was the initial Title V permit issued to Ash Grove Cement in Foreman, Arkansas. This permit allowed for several changes at this facility. The portable crusher (SN-R22) was permitted for the first time. Ash Grove installed 10 new LWDF tanks and changed the control device to a thermal oxidizer with a carbon adsorption backup system. A clinker storage dome was added to the facility and the ESPs used to control emissions from the kilns were refurbished. Also, the quarry (formerly permitted under permit #1235-AR-1) which supplies limestone for use in the cement kilns was included in this permit. The permit also incorporated the requirements of 40 CFR Part 63, Subpart LLL, National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry, and 40 CFR Part 63, Subpart EEE, National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors.

Permit 75-AOP-R1 was issued on May 30, 2003. This modification allowed Ash Grove to construct a new cement kiln dust (CKD) handling system (SN-P32, SN- P33, SN-P34, SN-P35 and SN-P36) and remove baghouses P18 and P19. This system allowed the CKD to be pneumatically conveyed across the highway to a new CKD landfill and it also allowed some of the CKD to be recycled to kiln #3. This modification resulted in net PM/PM_{10} emissions increases of 0.8 lb/hr and 2.6 tpy from the CKD handling equipment and 4 proposed new fabric filter dust collectors. Also, Ash Grove constructed a baghouse (SN-C44). This change resulted in an increase of PM/PM_{10} emissions of 0.17 lb/hr and 0.75 tpy. Finally, Ash Grove Cement Company added 3 drag conveyors and replaced 2 bucket conveyors and a belt conveyor that were part of the clinker handling system. The two bucket conveyors were the number 6 and number 7 bucket conveyors. The belt conveyor was the 440 belt. These conveyors are subject to all applicable sections of 40 CFR 63, Subpart LLL. No additional emissions are resulted from this modification.

Permit 75-AOP-R2 was issued on May 4, 2005. This modification combined and incorporated several requests for minor modifications to the Title V permit. This modification allowed for a redesign of the CKD handling system (SN-P32 through SN-P36) and the addition of P37. It was discovered that the system required additional conveying air. This modification also allowed Ash Grove to install a belt conveyor with integrated dust collector (SN-P38) to the CKD handling system.

Ash Grove has been given approval to manufacture a new product named DURACEM OW. Manufacture of this product will result in no increase in process emissions, however; there will be an increase in fugitive emissions from the haul roads (SN-R20). Finally, the facility replaced a bucket elevator in the Chalk Dryer System with a drag conveyor. No additional emissions occurred as a result of this change.

These changes resulted in net emissions increases of 1.5 tpy of PM and 3.1 tpy PM_{10} emissions from this facility.

Permit 75-AOP-R3 was issued on August 29, 2005. This modification allowed Ash Grove to install an additional baghouse for bins 26 and 27. The increased air flow resulting from installation of this new baghouse caused potential emissions increased by 4.5 tpy PM_{10}. This modification also corrected typographical errors found in 75-AOP-R2.

Permit 75-AOP-R4 was issued on January 12, 2006. Hydrogen chloride emissions were increased to match the emission rates allowed by 40 CFR 63, Subpart EEE. Other HAP emission rates were increased based on recent stack testing. Permitted increases were 597.7 tpy hydrogen chloride, 0.16 tpy acrylonitrile, 1.55 tpy benzene, 0.15 tpy bezidine, 0.11 tpy toluene, 0.16 tpy vinyl chloride. Ash Grove also changed the minimum kVa for each electrostatic precipitator based on data collected during the comprehensive performance test. The new minimum 3-hour rolling average kVa values are 198, 202, and 101 for kilns 1, 2, and 3 respectively.

Permit 75-AOP-R5 was issued on May 12, 2006. This modification allowed Ash Grove to install an additional baghouse (SN-P-39) on the 500 ton CKD Bin (SN-P35) and to replace a conveyor belt and add two baghouses (SN-C45 and C-46) to the clinker silos. These changes resulted in a permitted emissions increase of 2.4 tpy PM/PM_{10}.

Permit 75-AOP-R6 was issued on September 18, 2006. This modification allowed Ash Grove to replace an existing screw conveyor with a weigh belt (SN-M12) and add a conveyor belt to allow the addition of limestone to Mill No. 4 (SN-M46). This project resulted in additional permitted PM emissions of 0.5 tpy and PM_{10} emissions of 0.2 tpy.

SECTION IV: SPECIFIC CONDITIONS

SN-P1
Kiln #1

Source Description

This kiln is used to produce the clinker product. It may be fired by coal, natural gas, tire-derived fuel, liquid waste-derived fuel, or solid waste-derived fuel. This kiln can produce up to 50 tons per hour of clinker. Particulate emissions are controlled by an electrostatic precipitator with an efficiency of 99%.

Specific Conditions

66. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 70, 71 and 73. [Regulation 19, §19.501 et seq., effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	19.5	85.4
VOC	9.6	42.1

67. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 69. [Regulation 19, §19.501 et seq., effective December 19, 2004 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
SO_2	849.0	1960.0
CO	172.0	368.0
NO_x	889.0	2405.0

68. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 73. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	19.5	85.4
1,1,1-trichloroethane	0.01	0.02
1,1,2,2-tetrachloroethane	0.01	0.03
1,1,2-trichloroethane	0.01	0.04
1,1-dichloroethane	0.01	0.02
1,1-dichloroethene	0.16	0.69
1,2,4-trichlorobenzene	0.08	0.35
1,2-dichloroethane	0.01	0.05
1,2-dichloropropane	0.01	0.04
1,2-epoxybutane	0.01	0.01
1,3-butadiene	0.02	0.07
1,4-dichlorobenzene	0.19	0.18
1,4-phenylene-diamine	0.01	0.03
2,4,5-trichlorophenol	0.01	0.03
2,4,6-trichlorophenol	0.01	0.05
2,4-dinitrophenol	0.03	0.11
2,4-dinitrotoluene	0.02	0.01
2-butanone	0.21	0.91
3,3-dichlorobenzidine	0.01	0.04
3,3-dimethoxybenzidine	0.01	0.04
4-methyl-2-pentanone	0.02	0.09
4-nitrophenol	0.02	0.07
Acrylonitrile	0.03	0.11
allyl chloride	0.19	0.84
Aniline	0.005	0.02
Antimony	8.80	38.5

Pollutant	lb/hr	tpy
Arsenic	0.00258	0.00112
Benzene	0.22	0.95
Benzidine	0.02	0.07
Beryllium	0.00028	0.00123
bis(2-chloroethyl)ether	0.01	0.03
bis(2-ethylhexyl)phthalate	0.004	0.02
Bromodichloromethane	0.01	0.02
Bromoform	0.01	0.03
Bromomethane	0.26	1.15
Cadmium	.0307	0.134
carbon disulfide	0.08	0.37
carbon tetrachloride	0.01	0.02
Chlorine	0.00162	0.00780
Chlorobenzene	0.17	0.73
Chloroethane	1.05	4.59
Chloroform	0.01	0.06
Chloromethane	0.12	0.51
Chromium	0.00578	0.0253
cis-1,3-dichloropropene	0.01	0.05
cobalt✞	19.5	85.41
Cumene	0.01	0.03
Dimethylphthalate	0.002	0.01
ethyl acrylate	0.11	0.46
Ethylbenzene	0.09	0.38
ethylene dibromide	0.01	0.01
Hexachlorobenzene	0.01	0.02
Hexachlorobutadiene	0.01	0.03

Pollutant	lb/hr	tpy
Hexachlorocyclopentadiene	0.01	0.03
Hexachloroethane	0.01	0.04
hydrogen chloride	50.0	219.0
Hydroquinone	0.01	0.05
Iodomethane	0.03	0.13
Lead	0.06	0.263
Manganese	0.0430	0.188
Mercury	0.0694	0.304
methyl methacrylate	0.01	0.05
methylene chloride	2.24	9.80
Naphthalene	0.29	1.29
n-hexane	0.06	0.27
nickel✞	19.5	85.41
Nitrobenzene	0.005	0.02
N-nitrosoddiphenylamine	0.03	0.01
N-nitrosomorpholine	0.01	0.04
ortho-anisidine	0.01	0.04
ortho-toluidine	0.04	0.02
o-xylene	0.08	0.35
Pentachlorophenol	0.02	0.07
Phenol	0.05	0.22
Selenium	0.0075	0.0329
Styrene	0.03	0.12
tert-butyl methyl ether	0.01	0.02
Tetrachloroethene	0.06	0.020.28
Toluene	0.04	0.19
trans-1,3-dichloropropene	0.01	0.05

Pollutant	lb/hr	tpy
Trichloroethene	0.06	0.28
vinyl acetate	0.01	0.02
vinyl bromide	0.01	0.06
vinyl chloride	0.44	1.91
xylene	0.21	0.92

‡ While it is assumed that these metals are indeed emitted, as they are naturally occurring metals present in the raw materials used to manufacture cement, Ash Grove was not able to calculate an emission rate. Ash Grove requests the use of the particulate matter emission rate as limits for nickel and cobalt.

69. The permittee shall maintain continuous emission monitors (CEMs) to record SO_2, CO, and NO_x emissions at this source. These CEMs shall be operated in accordance with all applicable conditions of the Department's Continuous Emission Monitoring Systems Conditions as found in Appendix A of this permit. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

70. The permittee shall operate the electrostatic precipitators used to control particulate emissions at this source at a minimum kVA of electrical power input to the electrostatic precipitator. This minimum kVA rating shall be the sum of the kVA levels for the individual field of the ESP and shall be the level determined by the most recent passing stack test performed. Ash Grove shall notify the Department, in writing, when the kVA level is changed. This notification shall include a copy of the test results and the new value for the rating. Compliance shall be demonstrated through compliance with Specific Condition 75. [Regulation 19, §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

71. The permittee shall not produce more than 37,200 tons of clinker per month at this source. Compliance shall be demonstrated through compliance with the record keeping requirements set forth in Specific Condition 72. [Regulation 19, §19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

72. The permittee shall maintain records of the amount of clinker produced at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision 7. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and CFR Part 52, Subpart E]

73. The permittee shall not exceed the feed rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 74. [Regulation 19, §19.705, Regulation 18, §18.1004, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 70.6]

Fuel	Monthly Amount
Natural Gas	294.6 $MMft^3$
Coal	11,160 ton
Tire-derived Fuel	1,488 ton
LWDF	11,160 ton
SWDF	3,720 ton

LWDF = Liquid Waste-derived Fuel

SWDF = Solid Waste-derived Fuel

74. The permittee shall maintain records of the types and amounts of fuel used at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

75. The permittee shall record the sum of the electrical power input in kilovolt-amperes (kVA) to each field of the electrostatic precipitator used to control particulate emissions from this source. A reading of the electrical power input to each field of the electrostatic precipitator shall be taken a minimum of once per day of operation. These records shall be kept on site and made available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A.§8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

76. Visible emissions from this source shall not exceed 20% opacity. No later than September 30, 2002, compliance shall be demonstrated with a continuous opacity monitor. Until installation and certification of the continuous opacity monitor occurs, the permittee shall continue to demonstrate compliance through compliance with Plantwide Condition #10. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR Part 63.1209(a)(1), and A.C.A.§8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-P2
Kiln #2

Source Description

This kiln is used to produce the clinker product. It may be fired by coal, natural gas, tire-derived fuel, liquid waste-derived fuel, or solid waste-derived fuel. This kiln can produce up to 50 tons per hour of clinker. Particulate emissions are controlled by an electrostatic precipitator with an efficiency of 99%.

Specific Conditions

77. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Conditions 81, 82 and 83. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	19.5	85.4
VOC	9.6	42.1

78. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 80. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
SO_2	753.0	1690.0
CO	152.0	333.0
NO_x	882.0	2450.0

79. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition by Specific Condition 83. [Regulation 18, §18.801 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	19.5	85.4
1,1,1-trichloroethane	0.01	0.02
1,1,2,2-tetrachloroethane	0.01	0.03

Pollutant	lb/hr	tpy
1,1,2-trichloroethane	0.01	0.04
1,1-dichloroethane	0.01	0.02
1,1-dichloroethene	0.16	0.69
1,2,4-trichlorobenzene	0.08	0.35
1,2-dichloroethane	0.01	0.05
1,2-dichloropropene	0.01	0.02
1,2-epoxybutane	0.01	0.01
1,3-butadiene	0.02	0.07
1,4-dichlorobenzene	0.19	0.18
1,4-phenylene-diamine	0.01	0.03
2,4,5-trichlorophenol	0.01	0.03
2,4,6-trichlorophenol	0.01	0.05
2,4-dinitrophenol	0.03	0.11
2,4-dinitrotoluene	0.02	0.01
2-butanone	0.21	0.91
3,3-dichlorobenzidine	0.01	0.04
3,3-dimethoxybenzidine	0.01	0.04
4-methyl-2-pentanone	0.02	0.09
4-nitrophenol	0.02	0.07
acrylonitrile	0.03	0.11
allyl chloride	0.19	0.84
aniline	0.005	0.02
antimony	8.80	38.5
arsenic	0.00258	0.00112
benzene	0.22	0.95
benzidine	0.02	0.07
beryllium	0.00028	0.00123

Pollutant	lb/hr	tpy
bis(2-chloroethyl)ether	0.01	0.03
bis(2-ethylhexyl)phthlate	0.004	0.02
bromodichloromethane	0.01	0.02
bromoform	0.01	0.03
bromomethane	0.26	1.15
cadmium	0.0307	0.134
carbon disulfide	0.08	0.37
carbon tetrachloride	0.01	0.02
chlorine	0.00162	0.00780
chlorobenzene	0.17	0.73
chloroethane	1.05	4.59
chloroform	0.01	0.06
chloromethane	0.12	0.51
chromium	0.00578	0.0253
cis-1,3-dichloropropene	0.01	0.05
cobalt✞	19.5	85.41
cumene	0.01	0.03
dimethylphthalate	0.002	0.01
ethyl acrylate	0.11	0.46
ethylbenzene	0.09	0.38
ethylene dibromide	0.01	0.01
hexachlorobenzene	0.01	0.02
hexachlorobutadiene	0.01	0.03
hexachlorocyclopentadiene	0.01	0.03
hexachloroethane	0.01	0.04
hydrogen chloride	50.0	219.0
hydroquinone	0.01	0.05

Pollutant	lb/hr	tpy
iodomethane	0.03	0.13
manganese	0.0430	0.188
lead	0.06	0.263
mercury	0.0694	0.304
methyl methacrylate	0.01	0.05
methylene chloride	2.24	9.80
naphthalene	0.29	1.29
n-hexane	0.06	0.27
nickel✞	19.5	85.41
nitrobenzene	0.005	0.02
N-nitrosoddiphenylamine	0.03	0.01
N-nitrosomorpholine	0.01	0.04
ortho-anisidine	0.01	0.04
ortho-toluidine	0.04	0.02
o-xylene	0.08	0.35
pentachlorophenol	0.02	0.07
phenol	0.05	0.22
selenium	0.0075	0.0329
styrene	0.03	0.12
tert-butyl methyl ether	0.01	0.02
tetrachloroethene	0.06	0.28
toluene	0.04	0.19
trans-1,3-dichloropropene	0.01	0.05
trichloroethene	0.06	0.28
vinyl acetate	0.01	0.02
vinyl bromide	0.01	0.06
vinyl chloride	0.44	1.91

Pollutant	lb/hr	tpy
xylene	0.21	0.92

‡ While it is assumed that these metals are indeed emitted, as they are naturally occurring metals present in the raw materials used to manufacture cement, Ash Grove was not able to calculate an emission rate. Ash Grove requests the use of the particulate matter emission rate as limits for nickel and cobalt.

80. The permittee shall maintain continuous emission monitors (CEMs) to record SO_2, CO, and NO_x emissions at this source. These CEMs shall be operated in accordance with all applicable conditions of the Department's Continuous Emission Monitoring Systems Conditions as found in Appendix A of this permit. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

81. The permittee shall operate the electrostatic precipitators used to control particulate emissions at this source at a minimum kVA of electrical power input to the electrostatic precipitator. This minimum kVA rating shall be the sum of the kVA levels for the individual field of the ESP and shall be the level determined by the most recent passing stack test performed. Ash Grove shall notify the Department, in writing, when the kVA level is changed. This notification shall include a copy of the test results and the new value for the rating. Compliance shall be demonstrated through compliance with Specific Condition #86. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

82. The permittee shall not produce more than 37,200 tons of clinker per month at this source. Compliance shall be demonstrated through compliance with the record keeping requirements set forth on Specific Condition 84. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

83. The permittee shall not exceed the feed rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 85. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

Fuel	Monthly Amount
Natural Gas	294.6 $MMft^3$
Coal	11,160 ton
Tire-derived Fuel	1,488 ton
LWDF	11,160 ton
SWDF	3,720 ton

LWDF = Liquid Waste-derived Fuel

SWDF = Solid Waste-derived Fuel

84. The permittee shall maintain records of the amount of clinker produced at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

85. The permittee shall maintain records of the types and amounts of fuel used at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

86. The permittee shall record the sum of the electrical power input in kilovolt-amperes (kVA) to each field of the electrostatic precipitator used to control particulate emissions from this source. A reading of the electrical power input to each field of the electrostatic precipitator shall be taken a minimum of once per day of operation. These records shall be kept on site and made available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

87. Visible emissions from this source shall not exceed 20% opacity. No later than September 30, 2002, compliance shall be demonstrated with a continuous opacity monitor. Until installation and certification of the continuous opacity monitor occurs, the permittee shall continue to demonstrate compliance through compliance with Plantwide Condition #10. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR Part 63.1209(a)(1), and A.C.A.§8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-P3
Kiln #3

Source Description

This kiln is used to produce the clinker product. It may be fired by coal, natural gas, tire-derived fuel, liquid waste-derived fuel, or solid waste-derived fuel. This kiln can produce up to 70 tons per hour of clinker. Particulate emissions are controlled by an electrostatic precipitator with an efficiency of 99%.

Specific Conditions

88. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Conditions 92, 93, and 94. [§19.501 et seq. Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	27.0	118.3
VOC	13.44	58.87

89. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 91. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	Tpy
SO_2	961.0	2090.0
CO	220.0	482.0
NO_x	1568.0	4231.0

90. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 94. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	27.0	118.3
1,1,1-trichloroethane	0.01	0.01
1,1,2,2-tetrachloroethane	0.01	0.04
1,1,2-trichloroethane	0.01	0.03
1,1-dichloroethane	0.01	0.01

Pollutant	lb/hr	tpy
1,1-dichloroethene	0.01	0.02
1,2,4-trichlorobenzene	0.01	0.02
1,2-dichloroethane	1.67	7.32
1,2-dichloropropane	0.01	0.04
1,2-epoxybutane	0.07	0.3
1,3-butadiene	0.49	2.13
(cis, trans)1,3-dichloropropene	0.03	0.13
1,4-dichlorobenzene	0.01	0.01
1,4-phenylene-diamine	0.06	0.26
2,4,5-trichlorophenol	0.01	0.02
2,4,6-trichlorophenol	0.17	0.76
2,4-dinitrophenol	0.01	0.03
2,4-dinitrotoluene	0.01	0.01
2-butanone	0.2	0.87
3,3-dichlorobenzidine	0.01	0.01
3,3-dimethoxybenzidine	0.01	0.02
4-methyl-2-pentanone	0.01	0.03
4-dinitrophenol	0.01	0.03
acrylonitrile	0.03	0.14
allyl chloride	0.15	0.66
Aniline	0.01	0.02
antimony	12.9	56.6
arsenic	0.0005	0.00219
benzene	0.37	1.63
benzidine	0.02	0.07
beryllium	0.00007	0.000274
bis(2-chloroethyl)ether	0.01	0.02
bis(2-ethylhexyl)phthlate	0.74	3.24
bromodichloromethane	0.02	0.09
bromoform	0.01	0.06
bromomethane	0.26	1.13
cadmium	0.00373	0.0163
carbon disulfide	0.01	0.01
carbon tetrachloride	0.01	0.02
chlorine	1.34	5.85
chlorobenzene	0.01	0.06
chloroethane	0.01	0.01
chloroform	0.22	0.95
chloromethane	1.95	8.53
chromium	0.00403	0.0177
Cobalt	27.0	118.3

Pollutant	lb/hr	tpy
cumene	0.01	0.04
dimethylphthalate	0.01	0.01
ethyl acrylate	0.13	0.58
ethylbenzene	0.01	0.05
ethylene dibromide	0.01	0.02
hexachlorobenzene	0.01	0.01
hexachlorobutadiene	0.01	0.03
hexachlorocyclopentadiene	0.01	0.02
hexachloroethane	0.01	0.02
hydrogen chloride	71.0	311.0
hydroquinone	0.02	0.07
iodomethane	0.01	0.03
Lead	0.10	0.438
m/p xylene	0.43	1.89
manganese	0.0602	0.264
mercury	0.0759	0.332
methyl methacrylate	0.01	0.05
methylene chloride	0.24	1.03
naphthalene	0.38	1.68
n-hexane	0.07	0.33
nickel	27.0	118.3
nitrobenzene	0.02	0.07
N-nitrosoddiphenylamine	0.01	0.01
N-nitrosomorpholine	0.01	0.05
ortho-anisidine	0.01	0.03
ortho-toluidine	0.01	0.01
o-xylene	0.2	0.86
pentachlorophenol	0.01	0.01
phenol	0.09	0.38
selenium	0.0105	0.046
styrene	0.01	0.02
tert-butyl methyl ether	0.01	0.01
tetrachloroethene	0.01	0.02
toluene	0.04	0.18
trans-1,3-dichloropropene	0.01	0.02
trichloroethene	0.01	0.03
vinyl acetate	0.01	0.02
vinyl bromide	0.11	0.49
vinyl chloride	0.03	0.14

‡ While it is assumed that these metals are indeed emitted, as they are naturally occurring metals present in the raw materials used to manufacture cement, Ash Grove was not able to calculate an

emission rate. Ash Grove requests the use of the particulate matter emission rate of 19.5 lb/hr and 85.41 tpy for Kiln 1 and 2, 27.0 lb/hr and 118.3 tpy for Kiln 3, as stated in the HWC NESHAP (September 29, 1999, 64 FR 52879) preamble be incorporated as limits for nickel and cobalt.

91. The permittee shall maintain continuous emission monitors (CEMs) to record SO_2, CO, and NO_x emissions at this source. These CEMs shall be operated in accordance with all applicable conditions of the Department's Continuous Emission Monitoring Systems Conditions as found in Appendix A of this permit. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

92. The permittee shall operate the electrostatic precipitators used to control particulate emissions at this source at a minimum kVA of electrical power input to the electrostatic precipitator. This minimum kVA rating shall be the sum of the kVA levels for the individual field of the ESP and shall be the level determined by the most recent passing stack test performed. Ash Grove shall notify the Department, in writing, when the kVA level is changed. This notification shall include a copy of the test results and the new value for the rating. Compliance shall be demonstrated through compliance with Specific Condition 97. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

93. The permittee shall not produce more than 52,080 tons of clinker per month at this source. Compliance shall be demonstrated through compliance with the record keeping requirements set forth in Specific Condition 95. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

94. The permittee shall not exceed the feed rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 96. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 and 40 CFR Part 70.6]

Fuel	Monthly Amount
Natural Gas	412.2 $MMft^3$
Coal	18,600 tons
Tire-derived Fuel	2,231 ton
LWDF	11,160 ton
SWDF	3,720 ton

LWDF = Liquid Waste-derived Fuel

SWDF = Solid Waste-derived Fuel

95. The permittee shall maintain records of the amount of clinker produced at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision# 7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

96. The permittee shall maintain records of the types and amounts of fuel used at this source. These records shall be kept on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. A rolling twelve month total of these amounts shall be kept on site and be made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

97. The permittee shall record the sum of the electrical power input in kilovolt-amperes (kVA) to each field of the electrostatic precipitator used to control particulate emissions from this source. A reading of the electrical power input to each field of the electrostatic precipitator shall be taken a minimum of once per day of operation. These records shall be kept on site and made available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

98. Visible emissions from this source shall not exceed 20% opacity. No later than September 30, 2002, compliance shall be demonstrated with a continuous opacity monitor. Until installation and certification of the continuous opacity monitor occurs, the permittee shall continue to demonstrate compliance through compliance with Plantwide Condition #9. [§19.703 of Regulation 19, 40 CFR Part 52, Subpart E, 40 CFR Part 63.1209(a)(1), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Transfer points for Pyroprocessing Unit

Source Description

These are various transfer points associated with the pyroprocessing unit. Emissions from these points are considered uncontrolled and were calculated based on equipment maximum capacity using the formula contained in AP-42 §13.2.4-3 as found in Appendix B.

Specific Conditions

99. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Source	Source Name	Pollutant	lb/hr	tpy
P4	Discharge into Coal Mill #1	PM_{10}	0.1	0.1
P5*	Discharge from Kiln #1 to #1 Bucket Conveyor	PM_{10}	0.2	0.3
P7	Discharge into Coal Mill #2	PM_{10}	0.1	0.1
P8*	Discharge from Kiln #2 to #2 Bucket Conveyor	PM_{10}	0.1	0.3
P9	Discharge into Coal Mill #3	PM_{10}	0.1	0.1
P10*	Discharge from Kiln #3 to #3 Bucket Conveyor	PM_{10}	0.2	0.8
P11*	Discharge from Bin #48	PM_{10}	0.1	0.1
P12*	Discharge from Bin #48	PM_{10}	0.1	0.1
P13*	Discharge from Bin #47	PM_{10}	0.1	0.1
P15*	Baghouse Discharge to #2 Bucket Conveyor	PM_{10}	0.2	0.6
P16*	Baghouse Discharge to #3 Bucket Conveyor	PM_{10}	0.2	0.6
P20*	Truck Loading of CKD	PM_{10}	0.1	0.1
P21	Truck Unloading of CKD	PM_{10}	0.1	0.1
P22	Trailer Unloading of CKD	PM_{10}	0.1	0.1
P24	Transfer from Main Coal Pile	PM_{10}	0.1	0.2
P32*	1500 Ton CKD Storage Bin	PM_{10}	0.4	1.6
P33*	CKD Handling Screw Conveyor Bin Vent	PM_{10}	0.1	0.4

Source	Source Name	Pollutant	lb/hr	tpy
P34*	Kiln #3 Dust Scoop Bin Vent	PM_{10}	0.2	0.5
P35* P39[1]	CKD Handling 500 Ton Silo Baghouse	PM_{10}	0.3	1.1
P36*	Truck Loading of CKD (North of Hwy. 108)	PM_{10}	0.1	0.3
P37*	1500 ton CKD Storage Bin	PM_{10}	0.3	1.2
P38*	CKD Truck Loadout	PM_{10}	0.2	0.6

*Subject to 40 CFR 63, Subpart LLL

1. These baghouses are interlocked so only one may operate at any time.

100. The permittee shall not exceed the emission rates set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Source	Source Name	Pollutant	lb/hr	tpy
P4	Discharge into Coal Mill #1	PM	0.1	0.2
P5*	Discharge from Kiln #1 to #1 Bucket Conveyor	PM	0.2	0.8
P7	Discharge into Coal Mill #2	PM	0.1	0.1
P8*	Discharge from Kiln #2 to #2 Bucket Conveyor	PM	0.2	0.8
P9	Discharge into Coal Mill #3	PM	0.1	0.1
P10*	Discharge from Kiln #3 to #3 Bucket Conveyor	PM	0.6	2.3
P11*	Discharge from Bin #48	PM	0.1	0.1
P12*	Discharge from Bin #48	PM	0.1	0.1
P13*	Discharge from Bin #47	PM	0.1	0.1
P15*	Baghouse Discharge to #2 Bucket Conveyor	PM	0.4	1.6
P16*	Baghouse Discharge to #3 Bucket Conveyor	PM	0.4	1.6
P20*	Truck Loading of CKD	PM	0.1	0.2
P21	Truck Unloading of CKD	PM	0.1	0.2
P22	Trailer Unloading of CKD	PM	0.1	0.2
P24	Transfer from Main Coal Pile	PM	0.2	0.6

Source	Source Name	Pollutant	lb/hr	tpy
P32*	1500 Ton CKD Storage Bin	PM	0.4	1.6
P33*	CKD Handling Screw Conveyor Bin Vent	PM	0.1	0.4
P34*	Kiln #3 Dust Scoop Bin Vent	PM	0.2	0.5
P35* P39*	CKD Handling 500 Ton Silo Baghouses[1]	PM	0.3	1.1
P36*	Truck Loading of CKD (North of Hwy. 108)	PM	0.1	0.1
P37*	1500 ton CKD Storage Bin	PM	0.3	1.2
P38*	CKD Truck Loadout	PM	0.2	0.6

*Subject to 40 CFR 63, Subpart LLL

1. These baghouses are interlocked so only one may operate at any time.

101. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

102. SN-P21 and SN-P22 shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at SN-P21 and SN-P22 and the recording of the findings of the visual observations in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§18.901 of Regulation 18]

103. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

104. Visual emissions for SN-P4, P7, P9, and P24 shall not exceed 20 percent opacity. The permittee shall demonstrate compliance with this specific condition by conducting a visible opacity observation of the source at least once each calendar week in which the source operates, and keep a record of these observations. If visible emissions appear to exceed 20 percent opacity, the permittee shall take corrective action, and perform and record the observation again. If visible emissions still appear to exceed 20 percent opacity, the permittee shall conduct a six-minute opacity reading in accordance with the

EPA reference method No. 9. The records of visible emission observations and results of any method No. 9 reading shall be kept on site for five years and made available to Department personnel upon request. [Regulation 19 §19.503 and 40 CFR 52, Subpart E]

SN-P6
3 Clinker Coolers Baghouse

Source Description

This baghouse controls particulate emissions from the clinker coolers. Efficiency is assumed to be 99%.

Specific Conditions

105. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 107. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	Tpy
PM_{10}	25.0	110.0

106. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 107. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	25.0	110.0

107. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

108. Emissions from this clinker cooler shall not contain particulate matter in excess of 0.050 kg per Mg (0.l lb per ton) of feed (dry basis) to the kiln and visible emissions from this source shall not exceed 10% opacity. Pursuant to 40 CFR 63.1350(d)(1), compliance shall be demonstrated with a continuous opacity monitor. [40 CFR 63.1345, §19.503 of Regulation 19 and 40 CFR 52, Subpart E]

109. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-P17
Bin #49 Sock Filter

Source Description

This filter controls particulate emissions resulting from material transfer in and out of this bin. Efficiency is assumed to be 95%.

Specific Conditions

110. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 112. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	Tpy
PM_{10}	0.5	1.9

111. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 112. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.5	1.9

112. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

113. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

114. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition.

[§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-P23
CKD Pile

Source Description

This storage pile has a total area of 40 acres. Emissions from the cement kiln dust pile are controlled by surface watering.

Specific Conditions

115. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 117. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	Tpy
PM_{10}	0.6	2.6

116. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 117. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.2	5.2

117. The permittee shall maintain the area of this storage pile at or below 40 acres. Compliance shall be demonstrated by surveying the boundary perimeter of this pile. The permittee shall demarcate and record the perimeter of this pile with a global positioning system (GPS) instrument. A minimum of once per calendar year, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

118. This source shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at this source in accordance with EPA Method 22. The permittee shall maintain records of the observations performed. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§18.901 of Regulation 18]

Uncontrolled Transfer points in the Mill Area

Source Description

The Mill area consists of many different pieces of equipment. The uncontrolled emission rates were found based on equipment maximums using a formula contained in AP-42 page 13.2.4-3 as found in Appendix B.

Specific Conditions

119. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Name	Pollutant	lb/hr	tpy
M3	Gypsum Discharge into Finish Mill #4	PM_{10}	0.1	0.1
M4	Gypsum Discharge to Gypsum Elevator	PM_{10}	0.1	0.1
M9	Tripper Discharge into Bins	PM_{10}	0.1	0.1
M10	Discharge from Bin #45	PM_{10}	0.1	0.1
M11	Discharge into Bin #43	PM_{10}	0.1	0.4
M12	Discharge from Bin #44	PM_{10}	0.1	0.2
M13	Discharge from Bin #43	PM_{10}	0.1	0.4
M14	Transfer to B Belt	PM_{10}	0.1	0.4
M15	Transfer to B Belt	PM_{10}	0.1	0.1
M21	Discharge from Bin #42	PM_{10}	0.1	0.1
M22	Discharge from Bin #41	PM_{10}	0.1	0.1
M23	Transfer from Bin #41	PM_{10}	0.1	0.1
M24	Discharge from Bin #40	PM_{10}	0.1	0.1
M25	Discharge from D Belt into Chalk Dryer	PM_{10}	0.1	0.2
M26	Transfer to D Belt	PM_{10}	0.1	0.1
M27	Discharge from Bin #39	PM_{10}	0.1	0.2
M28	Transfer to Dry Feed Belt	PM_{10}	0.1	0.2
M29	Transfer to Dry Feed Belt	PM_{10}	0.1	0.1

SN	Source Name	Pollutant	lb/hr	tpy
M30	Transfer from #1 Clinker Bin to Dry Feed Belt	PM_{10}	0.2	0.6
M31	Discharge from Bin #38	PM_{10}	0.1	0.1
M32	Discharge from Bin #38	PM_{10}	0.1	0.1
M33	Discharge from Bin #37	PM_{10}	0.1	0.1
M34	Transfer to A1 Belt	PM_{10}	0.1	0.1
M35	Discharge from Bin #36	PM_{10}	0.1	0.1
M36	Transfer to A1 Belt	PM_{10}	0.1	0.1
M37	Transfer to A1 Belt	PM_{10}	0.1	0.1
M38	Transfer to A1 Belt	PM_{10}	0.1	0.1
M39	Discharge Into Raw Mill #3	PM_{10}	0.1	0.2
M40	Discharge from Gypsum Elevator into Feed Mill #4	PM_{10}	0.1	0.1
M46	Transfer from Limestone Feeder to Belt Conveyor	PM	0.1	0.2

120. The permittee shall not exceed the emission rates set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Name	Pollutant	lb/hr	tpy
M3	Gypsum Discharge into Finish Mill #4	PM	0.1	0.1
M4	Gypsum Discharge to Gypsum Elevator	PM	0.1	0.1
M9	Tripper Discharge into Bins	PM	0.1	0.2
M10	Discharge from Bin #45	PM	0.1	0.1
M11	Discharge into Bin #43	PM	0.3	1.0
M12	Discharge from Bin #44	PM	0.1	0.4
M13	Discharge from Bin #43	PM	0.3	1.0
M14	Transfer to B Belt	PM	0.3	1.0
M15	Transfer to B Belt	PM	0.1	0.1
M21	Discharge from Bin #42	PM	0.1	0.1

SN	Source Name	Pollutant	lb/hr	tpy
M22	Discharge from Bin #41	PM	0.1	0.1
M23	Transfer from Bin #41	PM	0.1	0.1
M24	Discharge from Bin #40	PM	0.1	0.1
M25	Discharge from D Belt into Chalk Dryer	PM	0.2	0.6
M26	Transfer to D Belt	PM	0.1	0.1
M27	Discharge from Bin #39	PM	0.1	0.4
M28	Transfer to Dry Feed Belt	PM	0.1	0.4
M29	Transfer to Dry Feed Belt	PM	0.1	0.1
M30	Transfer from #1 Clinker Bin to Dry Feed Belt	PM	0.4	1.6
M31	Discharge from Bin #38	PM	0.1	0.1
M32	Discharge from Bin #38	PM	0.1	0.1
M33	Discharge from Bin #37	PM	0.1	0.1
M34	Transfer to A1 Belt	PM	0.1	0.1
M35	Discharge from Bin #36	PM	0.1	0.1
M36	Transfer to A1 Belt	PM	0.1	0.1
M37	Transfer to A1 Belt	PM	0.1	0.1
M38	Transfer to A1 Belt	PM	0.1	0.1
M39	Discharge Into Raw Mill #3	PM	0.2	0.5
M40	Discharge from Gypsum Elevator into Feed Mill #4	PM	0.1	0.1
M46	Transfer from Limestone Feeder to Belt Conveyor	PM	0.2	0.5

121. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

122. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources

for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M16
#2 Finish Mill Baghouse

Source Description

This baghouse controls emission from the finish mill. Emissions are estimated to be 0.01 grains/ft^3. Efficiency is assumed to be 99%.

Specific Conditions

123. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 125. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.7	3.0

124. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 125. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.7	3.0

125. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

126. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through daily visible emissions observations using Method 22, corrective action and subsequent visible emissions observations in accordance with 40 CFR 63.1350(e). The visible observation requirement will be superseded if the permittee chooses the use of a continuous opacity monitor or bag leak detection system in place of the visible observations in accordance with 40 CFR 63.1350(m). The permittee shall notify the Department, in writing, of the date a COM or BLDS is put into service at this facility. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

127. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M17
#2 Finish Mill Discharge Baghouse

Source Description

After milling, the cement is discharged. Grinding aids containing HAPs and VOC are used in these mills. Particulate emissions from this discharge are controlled by a baghouse with an assumed efficiency of 99%.

Specific Conditions

128. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 130. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.5	2.0
VOC	3.8	16.3

129. The permittee shall not exceed the emission limit set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 130 and 141. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-203 and §8-3-311]

Pollutant	lb/hr	tpy
PM	0.5	2.0
Diethanolamine	0.2	0.6
Ethylene Glycol	0.1	0.2

130. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

131. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through daily visible emissions observations using Method 22, corrective action and subsequent visible emissions observations in accordance with 40 CFR 63.1350(e). The visible observation requirement will be superceded if the permittee chooses the use of a continuous opacity monitor or bag leak detection system in place of the visible observations in accordance with 40 CFR 63.1350(m). The permittee shall notify the Department, in writing, of the date a COM or

BLDS is put into service at this facility. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

132. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M18
#4 Finish Mill Baghouse

Source Description

After milling, the cement is discharged. Emissions from this discharge are controlled by a baghouse with an assumed efficiency of 99%.

Specific Conditions

133. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 135. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.1	4.7

134. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 135. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.1	4.7

135. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

136. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through daily visible emissions observations using Method 22, corrective action and subsequent visible emissions observations in accordance with 40 CFR 63.1350(e). The visible observation requirement will be superceded if the permittee chooses the use of a continuous opacity monitor or bag leak detection system in place of the visible observations in accordance with 40 CFR 63.1350(m). The permittee shall notify the Department, in writing, of the date a COM or BLDS is put into service at this facility. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

137. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M19
#4 Finish Mill Discharge Baghouse

Source Description

After milling, the cement is discharged. Grinding aids containing HAPs and VOC are used in these mills. Particulate emissions from this discharge are controlled by a baghouse with an assumed efficiency of 99%.

Specific Conditions

138. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 140. [Pursuant to §19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.6	6.7
VOC	27.8	122.0

139. The permittee shall not exceed the emission limit set forth in the following table. Compliance shall be demonstrated through compliance with Specific Conditions 140 and 141. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.6	6.7
Diethanolamine	1.0	4.1
Ethylene Glycol	0.4	1.4

140. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

141. The grinding aid used at this facility shall have a density less than or equal to 9.996 lb/gal and shall not contain more than 90% VOC or 4.0% HAP by weight. The HAPs contained in the grinding aid shall have a TLV greater than or equal to 2 mg/m^3. The permittee shall not use more than 196,910 lb of grinding aid per month. Compliance shall be demonstrated through compliance with Specific Condition 142. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

142. The permittee shall maintain records of the density, VOC content and HAP content of the grinding aid used. These records shall be in the form of an MSDS or the equivalent and shall be updated as necessary. The permittee shall maintain records of the amount of grinding aid used on a monthly basis. These records shall be updated on a monthly basis and made available to Department personnel upon request. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

143. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through daily visible emissions observations using Method 22, corrective action and subsequent visible emissions observations in accordance with 40 CFR 63.1350(e). The visible observation requirement will be superceded if the permittee chooses the use of a continuous opacity monitor or bag leak detection system in place of the visible observations in accordance with 40 CFR 63.1350(m). The permittee shall notify the Department, in writing, of the date a COM or BLDS is put into service at this facility. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

144. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M20
Dryer Scrubber

Source Description

Emissions from the dryer consist of products of combustion and additional particulate matter. Particulate matter is controlled using a wet scrubber with an efficiency of 95%. This scrubber operates at a gas flow of 18,000 ft^3/min and a liquid flow rate of 10 gal/min.

Specific Conditions

145. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 148. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.2	0.9
SO_2	0.1	0.2
VOC	0.5	1.9
CO	6.3	27.6
NO_x	7.5	32.9

146. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 148. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.4	1.8

147. Emissions from this source shall not exceed 10% opacity. This source is subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated by observations of opacity from SN-M20 at least once each calendar week in which the dryer is in operation. These observations shall be performed using EPA Reference Method 22. Records of the operating periods of the dryer and the opacity observations shall be maintained in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§19.304 of Regulation 19 and 40 CFR 63.1348]

148. The permittee shall not use more than 55.8 $MMft^3$ of natural gas per month at this source. Compliance shall be demonstrated through compliance with the requirements set forth in

Specific Condition #149. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR 70.6]

149. The permittee shall maintain records of the amount of natural gas used at this source. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. The records shall be maintained on site and made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

150. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-M42, M43, M44, M45
Bin Dust Collectors

Source Description

These baghouses are used to control emissions resulting from material transfer to storage bins. The efficiency of each baghouse is assumed to be 99%.

Specific Conditions

151. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 153. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	Tpy
M42	PM_{10}	0.3	0.9
M43	PM_{10}	0.3	0.9
M44	PM_{10}	0.3	0.9
M45	PM_{10}	0.3	0.9

152. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 153. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
M42	PM	0.3	0.9
M43	PM	0.3	0.9
M44	PM	0.3	0.9
M45	PM	0.3	0.9

153. The permittee shall operate the control equipment associated with these sources in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

154. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and

§8-4-311, §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

155. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-F4
Long Term Coal Pile

Source Description

Coal is stored in this pile until it is moved to the active coal pile and fed to the kilns.

Specific Conditions

156. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 158. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.5

157. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 158. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.9

158. The permittee shall maintain the area of this storage pile at or below 3.0 acres. Compliance shall be demonstrated through compliance with Specific Condition 159. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

159. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the long term coal pile that encompasses an area no greater than 3.0 acres. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

160. This source shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at this source in accordance with EPA Method 22. The permittee shall maintain records of the observations performed. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§18.901 of Regulation 18]

SN-F5
Active Coal Pile

Source Description

This is where the coal from the long term pile is transferred. Coal is fed to the kilns from this pile.

Specific Conditions

161. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 163. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.3

162. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 163. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.6

163. The permittee shall maintain the area of this storage pile at or below 1.0 acre. Compliance shall be demonstrated through compliance with Specific Condition 164. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

164. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the active coal pile that encompasses an area no greater than 1.0 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

165. This source shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at this source in accordance with EPA Method 22. The permittee shall maintain records of the observations performed. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§18.901 of Regulation 18]

Uncontrolled Emission Points in the Fuel Area

Source Description

The fuel area consists of many different pieces of equipment. The uncontrolled emission rates were found based on equipment maximums using a formula contained in AP-42 page 13.2.4-3 as found in Appendix B.

Specific Conditions

166. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Description	Pollutant	lb/hr	tpy
F6	Discharge into Feed Hopper #5	PM_{10}	0.3	0.6
F8	Coal Stacker Belt	PM_{10}	0.1	0.1
F9	Discharge into Feed Hopper #4	PM_{10}	0.3	0.6
F11	Transfer to #206 Belt	PM_{10}	0.1	0.1
F12	Transfer to #206 Belt	PM_{10}	0.1	0.1
F13	Transfer to #208 Belt	PM_{10}	0.1	0.1
F14	Transfer to Stacker Belt	PM_{10}	0.3	0.6
F15	Unloading into Long Term Coal Pile	PM_{10}	0.2	0.5
F16	Transfer from Long Term Coal Pile to Active Pile	PM_{10}	0.2	0.5
F17	Coal Feeders	PM_{10}	0.1	0.2
F18	Railcar Unloading into Coal Hoppers 4 and 5	PM_{10}	0.3	1.0

167. The permittee shall not exceed the emission rates set forth in the following. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Description	Pollutant	lb/hr	Tpy
F6	Discharge into Feed Hopper #5	PM	0.6	1.7
F8	Coal Stacker Belt	PM	0.1	0.1

SN	Source Description	Pollutant	lb/hr	Tpy
F9	Discharge into Feed Hopper #4	PM	0.6	1.7
F11	Transfer to #206 Belt	PM	0.1	0.1
F12	Transfer to #206 Belt	PM	0.1	0.1
F13	Transfer to #208 Belt	PM	0.1	0.1
F14	Transfer to Stacker Belt	PM	0.6	1.7
F15	Unloading into Long Term Coal Pile	PM	0.5	1.2
F16	Transfer from Long Term Coal Pile to Active Pile	PM	0.5	1.2
F17	Coal Feeders	PM	0.2	0.6
F18	Railcar Unloading into Coal Hoppers 4 and 5	PM	0.6	2.7

168. Visual emissions for these sources shall not exceed 20 percent opacity. The permittee shall demonstrate compliance with this specific condition by conducting a visible opacity observation of the source at least once each calendar week in which the source operates, and keep a record of these observations. If visible emissions appear to exceed 20 percent opacity, the permittee shall take corrective action, and perform and record the observation again. If visible emissions still appear to exceed 20 percent opacity, the permittee shall conduct a six minute opacity reading in accordance with the EPA reference method No. 9. The records of visible emission observations and results of any method No. 9 reading shall be kept on site for five years and made available to Department personnel upon request. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

169. SN-F15 and SN-F16 shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at SN-F15 and SN-F16 and the recording of the findings of the visual observations in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§18.901 of Regulation 18]

SN-F19, F20
Liquid Waste-derived Fuel Tanks

Source Description

LWDF is received in rail tank cars and in tank trucks and stored in above ground storage tanks before being transferred to the kilns. There are ten above ground storage tanks. To control VOC emissions, tanks are vented to a thermal oxidizer with a back up carbon adsorption system.

Specific Conditions

170. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 182. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.2
SO_2	0.1	0.2
VOC	16.9	3.0
CO	0.5	2.0
NO_x	0.6	2.4

171. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 182. [§18.8 of Regulation 18 and A.C.A. §8-3-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.2
Xylene (mixed isomers)	1.26	0.2
Toluene	0.7	0.2
Methylene Chloride	0.1	0.1
Ethyl Benzene	0.33	0.1
Styrene	0.20	0.1
Tetrachloroethene	0.1	0.1

Pollutant	lb/hr	tpy
1,1,2 trichloroethane	0.1	0.1
Benzene	0.1	0.1

172. This subpart applies to each storage vessel with a capacity greater than 40 cubic meters (m^3) that is used to store volatile organic liquids (VOLs) for which construction, reconstruction, or modification is commenced after July 23, 1984. [§19.304 of Regulation 19 and 40 CFR Part 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984, §60.110b(a)]

173. Each storage vessel with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa, but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3, but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa, but less than 76.6 kPa, shall equip each storage vessel with the following: [§19.304 of Regulation 19 and 40 CFR Part 60, §60.112b(a)]

    a. These vessels shall be equipped with a closed vent system and control device meeting the following specifications: [§60.112b(a)(3)]
        i. The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections as determined in Part 60, Subpart VV, §60.485(b).
        ii. The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater.

174. Each source that is equipped with a closed vent system and control device (the thermal oxidizer at this facility) as required in §60.112b(a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements. [§19.304 of Regulation 19 and 40 CFR Part 60, §60.113b(c)]

    a. Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.

        i. Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design

specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuel types from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816°C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

ii. A description of the parameter or parameters to be monitored to insure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

b. Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modification applies.

175. The permittee shall maintain records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least two years. The record required by (c)(1) will be kept for the life of the control equipment. [§19.304 of Regulation 19 and 40 CFR 60, §60.115b]

176. After installing control equipment in accordance with §60.112b(a)(3) or (b)(1) (closed vent system and control device other than a flare), the permittee shall keep the following records. [§19.304 of Regulation 19 and 40 CFR 60, §60.115b(c)]

a. A copy of the operating plan.
b. A record of the measured values of the parameters monitored in accordance with §60.112b(c)(2).

177. The permittee shall keep copies of all records required by this section, except for records required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section shall be kept for the life of the source. [§19.304 of Regulation 19 and 40 CFR 60, §60.116b(a)]

178. The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage tank with a design capacity less than 75 m^3 is subject to no provision of this subpart other than those required by this paragraph. [§19.304 of Regulation 19 and 40 CFR 60, §60.116b(b)]

179. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based on the highest expected calendar month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based on the maximum local monthly average ambient temperature as reported by the National Weather Service. [§19.304 of Regulation 19 and 40 CFR 60, §60.116b(e)]

180. The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements. [§19.304 of Regulation 19 and 40 CFR 60, §60.116b(f)]

    a. Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.

    b. For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:

        i. ASTM Method D2879-83 (incorporated by reference-see §60.17); or
        ii. ASTM Method D323-82 (incorporated by reference-see §60.17); or
        iii. As measured by an appropriate method as approved by the Administrator.

181. Visible emissions from this source shall not exceed 10% opacity. Compliance shall be demonstrated by using only natural gas as fuel in the thermal oxidizer. [§18.501 of Regulation 18 and A.C.A. §8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

182. The permittee shall determine the destruction efficiency of the thermal oxidizing unit either using an appropriate test method or through the use of engineering calculations. If testing is used, the test shall be performed a minimum of once every five years. The initial test shall be performed no later than 180 days after the initial startup date. This test shall be performed with this unit operating at or above 90% of its design capacity. This unit shall achieve a VOC destruction rate of not less than 95%. If engineering calculations are used, the permittee shall maintain a complete design analysis of the unit which shall contain documentation necessary to demonstrate the performance of the unit. [§19.702 of Regulation 19 and 40 CFR Part 52, Subpart E]

183. The permittee shall maintain the temperature in the combustion chamber of the thermal oxidizer at or above 1500°F. To demonstrate compliance, the permittee shall install, calibrate, and maintain a continuous temperature recorder on the catalytic oxidizer used to control emissions from these sources. These records shall be maintained on site and made available to Department personnel upon request. [§19.703 of Regulation 19, 40

CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

184. During operation of the dual carbon canister system as a replacement for thermal oxidizer at this source, the permittee shall use good engineering judgment and/or vendor recommendations to determine the frequency to observe the condition of the breakthrough indicators on the carbon canisters in the absorption train. Observation of the breakthrough indicators on the carbon canisters shall occur no less often than the conclusion of each operating shift in which working losses were directed through the carbon canister absorption train. If breakthrough is detected, the system shall be reconfigured and, as necessary, canisters shall be recharged. The permittee shall maintain a log of the observations of the breakthrough indicators and the recharging of the carbon canisters. These records shall be maintained on site and made available to Department personnel upon request. [§19.703 of Regulation 19, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-S1, S3, S13, S14
Truck Loadout Dust Collectors

Source Description

Trucks are loaded at these points. Emissions are controlled using baghouses assumed to be 99% efficient.

Specific Conditions

185. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 187. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
S1, DC #31	PM_{10}	0.2	0.8
S3, DC#49	PM_{10}	0.7	3.0
S13, DC #28	PM_{10}	0.5	2.0
S14	PM_{10}	1.1	4.5

186. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 187. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
S1, DC #31	PM	0.2	0.8
S3, DC#49	PM	0.7	3.0
S13, DC #28	PM	0.5	2.0
S14	PM	1.1	4.5

187. The permittee shall operate the control equipment associated with these sources in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

188. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and

§8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

189. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-S4, S5, S6, S7, S8, S9, S10, S11, S12
Silo Dust Collectors

Source Description

These baghouses control particulate emissions resulting from material transfer in and out of silos. Efficiencies are assumed to be 99%.

Specific Conditions

190. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 192. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	Tpy
S4, DC #21	PM_{10}	0.5	2.1
S5, DC #22	PM_{10}	0.2	0.7
S6, DC #23	PM_{10}	0.6	2.5
S7, DC #24	PM_{10}	0.7	3.0
S8, DC #29	PM_{10}	0.2	0.8
S9, DC #30	PM_{10}	0.2	0.7
S10, DC #25	PM_{10}	0.3	1.0
S11, DC #26	PM_{10}	0.7	3.0
S12, DC #27	PM_{10}	0.6	2.5
S15	PM_{10}	0.3	1.0

191. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 192. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
S4, DC #21	PM	0.5	2.1
S5, DC #22	PM	0.2	0.7
S6, DC #23	PM	0.6	2.5
S7, DC #24	PM	0.7	3.0
S8, DC #29	PM	0.2	0.8

SN	Pollutant	lb/hr	tpy
S9, DC #30	PM	0.2	0.7
S10, DC #25	PM	0.4	1.6
S11, DC #26	PM	0.7	3.0
S12, DC #27	PM	0.6	2.5
S15	PM	0.3	1.0

192. The permittee shall operate the control equipment associated with these sources in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

193. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

194. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-C1
Clinker Transfer Tower Baghouse

Source Description

This baghouse controls particulate emissions resulting from material transfer at this source. Efficiency is assumed to be 99%.

Specific Conditions

195. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 197. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	1.8	7.6

196. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 197. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.8	7.6

197. The permittee shall operate the control equipment associated with this source in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

198. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

199. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition.

[§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Uncontrolled Emission Points in the Clinker Area

Source Description

The clinker area consists of many different pieces of equipment. The uncontrolled emission rates were found based on equipment maximums using a formula contained in AP-42 page 13.2.4-3 as found in Appendix B.

Specific Conditions

200. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Name	Pollutant	lb/hr	tpy
C2	Outside Clinker Belt Discharge	PM_{10}	0.5	1.9
C3	Outside Clinker Reclaim Hopper Loading	PM_{10}	0.2	0.8
C4	Discharge from Clinker Reclaim Hopper	PM_{10}	0.029	0.13
C5*	Clinker Railcar and Truck Hopper Loading	PM_{10}	0.180	0.79
C6	Clinker Discharge to Railcar/Truck	PM_{10}	0.1	0.3
C7*	Transfer from Reclaim Belt to #7 Belt	PM_{10}	0.060	0.26
C8*	Transfer to #7 Belt	PM_{10}	0.180	2.26
C9*	Transfer from #7 Belt to #8 Belt	PM_{10}	0.042	0.18
C10*	Transfer from #8 Belt to #9 Belt	PM_{10}	0.222	0.97
C11*	Discharge from #2 Clinker Bin	PM_{10}	0.282	1.24
C15*	Discharge into #2 Clinker Bin	PM_{10}	0.030	0.13
C16*	Transfer from #9 Belt	PM_{10}	0.282	1.24
C17*	Discharge from #1 Clinker Bin	PM_{10}	0.282	1.24
C19*	Transfer to Belt Conveyor	PM_{10}	0.030	0.13
C20*	Discharge into #1 Clinker Bin	PM_{10}	0.030	0.13

SN	Source Name	Pollutant	lb/hr	tpy
C21*	Transfer to 4A Belt	PM_{10}	0.086	0.38
C28*	Discharge into Clinker Elevator	PM_{10}	0.055	0.24
C36*	Discharge into Clinker Elevator	PM_{10}	0.589	2.58

*Subject to 40 CFR 63, Subpart LLL

201. The permittee shall not exceed the emission rates set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Name	Pollutant	lb/hr	tpy
C2	Outside Clinker Belt Discharge	PM	1.3	5.4
C3	Outside Clinker Reclaim Hopper Loading	PM	0.6	2.3
C4	Outside Clinker Storage Pile	PM	0.1	0.3
C5*	Discharge from Clinker Reclaim Hopper	PM	0.6	2.3
C6	Clinker Railcar and Truck Hopper Loading	PM	0.2	0.8
C7*	Clinker Discharge to Railcar/Truck	PM	0.2	0.8
C8*	Transfer from Reclaim Belt to #7 Belt	PM	0.6	2.3
C9*	Transfer to #7 Belt	PM	0.2	0.6
C10*	Transfer from #7 Belt to #8 Belt	PM	0.7	2.8
C11*	Transfer from #8 Belt to #9 Belt	PM	0.9	3.6
C15*	Discharge from #2 Clinker Bin	PM	0.1	0.4
C16*	Discharge into #2 Clinker Bin	PM	0.9	3.6
C17*	Transfer from #9 Belt	PM	0.9	3.6
C19*	Discharge from #1 Clinker Bin	PM	0.1	0.4
C20*	Transfer to Belt Conveyor	PM	0.1	0.4

SN	Source Name	Pollutant	lb/hr	tpy
C21*	Discharge into #1 Clinker Bin	PM	0.1	0.4
C28*	Transfer to 4A Belt	PM	0.2	0.7
C36*	Discharge into Clinker Elevator	PM	1.7	7.4
C37	Discharge into Clinker Elevator	PM	0.2	0.5

*Subject to 40 CFR 63, Subpart LLL

202. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

203. SN-C2, SN-C3, SN-C6 and SN-C37 shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at SN-C2, SN-C3, SN-C6 and SN-C37 and the recording of the findings of the visual observations in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§18.901 of Regulation 18]

204. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-C4
Outside Clinker Storage Pile

Source Description

Clinker is stored in this pile prior to being transported by conveyors to mill feed bins.

Specific Conditions

205. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 207. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.029	0.13

206. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 207. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.058	0.25

207. The permittee shall maintain the area of this storage pile at or below 2.0 acres. Compliance shall be demonstrated through compliance with Specific Condition 208. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

208. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the outside clinker storage pile that encompasses an area no greater than 2.0 acres. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

209. This source shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at this source in accordance with EPA Method 22. The permittee shall maintain records of the observations performed. These records shall be maintained on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision 7. [§18.901 of Regulation 18]

SN-C14, C18, C26, C27, C32, C34, C41, C42, C43, C44, C45, C46
Clinker Handling Dust Collectors

Source Description

These baghouses control particulate emissions resulting from material transfer in the clinker portion of this facility. Efficiencies are assumed to be 99%.

Specific Conditions

210. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 212. [§19.501 of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Name	Pollutant	Lb/hr	tpy
C14*	B Belt Dust Collector	PM_{10}	0.1	0.4
C18*	Clinker Elevator Dust Collector	PM_{10}	0.1	0.4
C26*	West Clinker Silo Dust Collector	PM_{10}	0.8	3.2
C27*	4A2 Belt Dust Collector	PM_{10}	0.6	2.7
C32*	East Clinker Silo Dust Collector	PM_{10}	0.8	3.2
C34*	West Clinker Tank Dust Collector	PM_{10}	0.2	0.8
C41*	Off-spec Bin and Ancillary Equipment Dust Collector	PM_{10}	0.4	1.4
C42*	Clinker Dome Dust Collector	PM_{10}	0.6	1.9
C43*	Reclaim Belt Dust Collector	PM_{10}	0.2	0.5
C44*	Off-Spec Bin Dust Collector	PM_{10}	0.17	0.75
C45*	Clinker Silo Baghouse	PM_{10}	0.3	1.2
C46*	Clinker Silo Baghouse	PM_{10}	0.3	1.2

*Subject to 40 CFR 63, Subpart LLL

211. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 212. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Name	Pollutant	lb/hr	tpy
C14*	B Belt Dust Collector	PM	0.1	0.4
C18*	Clinker Elevator Dust Collector	PM	0.1	0.4
C26*	West Clinker Silo Dust Collector	PM	0.8	3.2
C27*	4A2 Belt Dust Collector	PM	0.6	2.7
C32*	East Clinker Silo Dust Collector	PM	0.8	3.2
C34*	West Clinker Tank Dust Collector	PM	0.2	0.8
C41*	Off-spec Bin and Ancillary Equipment Dust Collector	PM_{10}	0.4	1.4
C42*	Clinker Dome Dust Collector	PM_{10}	0.6	1.9
C43*	Reclaim Belt Dust Collector	PM_{10}	0.2	0.5
C44*	Off-Spec Bin Dust Collector	PM	0.17	0.75
C45*	Clinker Silo Baghouse	PM	0.3	1.2
C46*	Clinker Silo Baghouse	PM	0.3	1.2

*Subject to 40 CFR 63, Subpart LLL

212. The permittee shall operate the control equipment associated with these sources in a manner consistent with good air pollution control practices in order to comply with the applicable emission limits. [§19.303 of Regulation 19 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

213. The permittee shall not operate sources SN-41, SN-42, and SN-43 more than 7,250 hours per year based on a rolling twelve month total. Compliance shall be demonstrated by maintaining records of the hours of operation of these sources. These records shall be maintained on a weekly basis and updated weekly. These records shall be maintained on site and made available to Department personnel upon request. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

214. Emissions from these sources shall not exceed 10% opacity. These sources are subject to all applicable requirements listed in Plantwide Condition #12. Compliance with the

opacity standard shall be demonstrated through compliance with Plantwide Condition #15. [§18.501 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , §19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*]

215. The permittee shall conduct initial compliance tests for all affected sources for which an initial compliance test has not been previously performed. Any of the affected sources for which the facility has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§63.1349(a) of 40 CFR Part 63, Subpart LLL and A.C.A.. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Uncontrolled Emission Points in the Raw Material Storage Area

Source Description

The Raw Material Storage area consists of many different pieces of equipment. The uncontrolled emission rates were found based on equipment maximums using a formula contained in AP-42 page 13.2.4-3 as found in Appendix B.

Specific Conditions

216. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Name	Pollutant	lb/hr	tpy
R1	Truck Unloading for Sand/Iron Ore	PM_{10}	0.7	2.8
R3	Discharge from Chalk Feeder	PM_{10}	0.1	0.1
R4	Discharge from Gypsum Feeder	PM_{10}	0.1	0.4
R6	Discharge from Sand/Iron-ore Feeder	PM_{10}	0.1	0.1
R8	Sand/Iron Ore Storage Transfer	PM_{10}	0.2	0.5
R9	Discharge from Emergency Feeder	PM_{10}	0.1	0.4
R10	Discharge of Gypsum Belt	PM_{10}	0.3	1.2
R11	Discharge into Secondary Crusher	PM_{10}	0.1	0.1
R13	Secondary Crusher Discharge	PM_{10}	0.1	0.1
R14	Transfer to #2 Belt	PM_{10}	0.1	0.1
R24	Transfer from Portable Crusher to Main Conveyor	PM_{10}	0.2	0.5

217. The permittee shall not exceed the emission rates set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Name	Pollutant	lb/hr	tpy
R1	Truck Unloading for Sand/Iron Ore	PM	1.9	8.0
R3	Discharge from Chalk Feeder	PM	0.1	0.2
R4	Discharge from Gypsum Feeder	PM	0.3	1.0
R6	Discharge from Sand/Iron-ore Feeder	PM	0.1	0.1
R8	Sand/Iron Ore Storage Transfer	PM	0.4	1.5
R9	Discharge from Emergency Feeder	PM	0.3	1.0
R10	Discharge of Gypsum Belt	PM	0.8	3.2
R11	Discharge into Secondary Crusher	PM	0.1	0.2
R13	Secondary Crusher Discharge	PM	0.1	0.2
R14	Transfer to #2 Belt	PM	0.1	0.2
R24	Transfer from Portable Crusher to Main Conveyor	PM	0.3	1.3

218. The opacity from sources R3, R4, R11, R13, and R14 shall not exceed 40%. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #10. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

219. The opacity from sources R6, R9, R10, and R24 shall not exceed 20%. Compliance with the opacity standard shall be demonstrated through compliance with Plantwide Condition #10. [§19.503 of Regulation 19 and 40 CFR Part 52, Subpart E]

220. SN-R1 and SN-R8 shall be operated so that unnecessary air contaminants do not become airborne. Compliance shall be demonstrated through a monthly visual observation of operations at SN-R1 and SN-R8 and the recording of the findings of the visual observations in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§18.901 of Regulation 18]

SN-R2
Chalk Storage Pile

Source Description

Chalk used to create the clinker at this facility is stored in a pile.

Specific Conditions

221. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 223. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.2

222. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 223. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.3

223. The permittee shall maintain the area of this storage pile at or below 1.50 acres. Compliance shall be demonstrated through compliance with Specific Condition 224. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

224. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the sand storage pile that encompasses an area no greater than 1.50 acres. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

225. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [18.901(A) of Regulation 18 and A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R5
Gypsum Storage Pile

Source Description

Gypsum used to manufacture Portland cement at this facility is stored in a pile.

Specific Conditions

226. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 228. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.1

227. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 228. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1

228. The permittee shall maintain the area of this storage pile at or below 0.22 acre. Compliance shall be demonstrated through compliance with Specific Condition 229. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

229. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the gypsum storage pile that encompasses an area no greater than 0.22 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

230. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [18.901(A) of Regulation 18 and A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R12
Secondary Crusher

Source Description

This crusher is used to crush the raw materials used at this facility. Chalk, sand, and iron ore are crushed and then transported to the mill building by a conveyor belt.

Specific Conditions

231. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 234. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.2	0.8

232. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 234. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.8

233. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [§19.503 of Regulation 19, §18.901 of Regulation 18 and, A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

234. The permittee shall not crush more than 744,000 tons of material per month at this source. Compliance shall be demonstrated through compliance with Specific Condition #235. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR 70.6]

235. The permittee shall maintain records of the amount of material crushed at this source. These records shall be maintained on a weekly basis. These records shall be kept on site and made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

236. The permittee shall conduct initial compliance tests for this source provided an initial compliance test has not been previously performed. Any sources for which the facility

has already tested need not be tested again, provided that the facility has documentation and the results of these tests. A copy of this documentation must accompany the results of the initial tests required by this Specific Condition. [§19.503 of Regulation 19, §18.901 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R17
Long Term Sand Pile

Source Description

Sand used to create the clinker at this facility is stored in a pile.

Specific Conditions

237. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 239. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.2

238. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 239. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.4

239. The permittee shall maintain the area of this storage pile at or below 1.0 acre. Compliance shall be demonstrated through compliance with Specific Condition 240. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

240. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the long term sand storage pile that encompasses an area no greater than 1.0 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

241. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [18.901(A) of Regulation 18 and A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R18
Iron Ore Storage Pile

Source Description

Iron ore used to create the clinker at this facility is stored in a pile.

Specific Conditions

242. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 244. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.3

243. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 244. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.2	0.6

244. The permittee shall maintain the area of this storage pile at or below 0.5 acre. Compliance shall be demonstrated through compliance with Specific Condition 245. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

245. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the iron ore storage pile that encompasses an area no greater than 0.5 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

246. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [18.901(A) of Regulation 18 and A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R19
Sand Storage Pile

Source Description

Sand used to create the clinker at this facility is stored in this pile after being moved from the long term storage pile until it is fed to the clinker.

Specific Conditions

247. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 249. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.1

248. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 249. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1

249. The permittee shall maintain the area of this storage pile at or below 0.25 acre. Compliance shall be demonstrated through compliance with Specific Condition 250. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

250. Within thirty days of the effective date of this operating air permit, the permittee shall survey a boundary perimeter to the sand storage pile that encompasses an area no greater than 0.25 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. A copy of these records shall be submitted in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

251. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [18.901(A) of Regulation 18 and A.C.A § 8-4-230 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN-R20
Fugitive Emissions from Plant Haul Roads

Source Description

Equipment and material are moved around the plant via a series of unpaved haul roads. Emissions from these roads were calculated using an equation contained in AP-42 §13.2.2 for unpaved roads.

Specific Conditions

252. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 254. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	3.6	13.4

253. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 254. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	13.1	47.2

254. The permittee shall follow the plant haul road fugitive dust control plan contained in Appendix H of the permit. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

SN-R22 & R23
Portable Crusher Diesel Engine and Portable Crusher

Source Description

This crusher is powered by a diesel engine and is used to crush spent kiln brick so that it may be added to the raw materials stored in the mill building, then fed to Kiln #3.

Specific Conditions

255. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 258. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	Tpy
R-22	PM_{10}	0.2	0.8
	SO_2	0.2	0.8
	VOC	0.2	0.9
	CO	0.6	2.3
	NO_x	2.5	10.6
R-23	PM_{10}	0.5	0.5

256. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 258. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Pollutant	lb/hr	tpy
R-22	PM	0.2	0.8
R-23	PM	0.5	0.5

257. Visible emissions from these sources shall not exceed 20% opacity. The permittee shall demonstrate compliance with this Specific Condition by conducting a visible opacity observation of these sources at least once each calendar week in which these sources operate and keep a record of these observations. If visible emissions appear to exceed 20% opacity, the permittee shall take corrective action, and perform and record the observation again. If visible emissions still appear to exceed 20% opacity, the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method #9. The records of visible emission observations and results of any Method #9 readings shall

be kept on site for five years and made available to Department personnel upon request. [§19.503 of Regulation 19, and 40 CFR Part 52, Subpart E]

258. The permittee shall not crush more than 59,520 tons of material per month at SN-R23. Compliance shall be demonstrated through compliance with Specific Condition #259. [§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR 70.6]

259. The permittee shall maintain records of the amount of material crushed at SN-R23. These records shall be maintained on a weekly basis. These records shall be kept on site and made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19 and 40 CFR Part 52, Subpart E]

260. The permittee shall use only #2 fuel oil as fuel at SN-R22. [§19.§19.705 of Regulation 19, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR 70.6]

SN-R25
Emergency Gypsum Storage Pile

Source Description

This pile is in place to allow for storage of gypsum so that production may continue if gypsum deliveries are interrupted.

Specific Conditions

261. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 263. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.1	0.1

262. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 263. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.1	0.1

263. The permittee shall maintain the area of this storage pile at or below 0.28 acre. Compliance shall be demonstrated through compliance with Specific Condition 264. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR Part 70.6 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

264. Within thirty days of the construction of this source, the permittee shall survey a boundary perimeter to the emergency gypsum storage pile that encompasses an area no greater than 0.28 acre. The permittee shall demarcate the perimeter on the ground by stakes, monuments or other permanent markers. At a minimum of once every three months, the permittee shall certify in the facility record that the footprint of the pile is within the confines of the established perimeter. If the footprint of the pile exceeds the established perimeter at any location, the permittee shall survey the pile to ascertain the true area of the pile and make appropriate notations in the facility record. These records shall be kept on site and made available to Department personnel upon request. [§19.705 of Regulation 19, §18.1004 of Regulation 18, 40 CFR 52, Subpart E and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311

SN-Q1
Quarry Haul Road

Source Description

Quarried material is hauled to the crushing area via this road.

Specific Conditions

265. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 267. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	5.2	22.5

266. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 267. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	23.5	102.8

267. The permittee shall water this haul road in accordance with a haul road watering plan. This plan shall be designed to minimize emissions from this source. A copy of this plan shall be kept on site and made available to Department personnel upon request. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

SN-Q2
Primary Crusher

Source Description

Quarried chalk is crushed at this source before being hauled to the raw materials storage area. This source was installed prior to the applicability date of NSPS Subpart OOO.

Specific Conditions

268. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 270. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.5	1.9

269. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 270. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	0.5	1.9

270. The permittee shall not crush more than 1,116,000 tons per month at this source. Compliance shall be demonstrated through compliance with Specific Condition 271. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

271. The permittee shall maintain records of the amount of material crushed at this source. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records shall be kept on site and made available to Department personnel upon request. A report of these records shall be submitted to the Department in accordance with General Provision #7. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 52, Subpart E]

272. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [§19.501 of Regulation 19 and 40 CFR part 52, Subpart E]

Uncontrolled Emission Points in the Quarry

Source Description

The quarry contains many different pieces of equipment. Emissions sources primarily consist of transfer points. The uncontrolled emission rates were found based on equipment maximums using emission factors contained in AP-42 table 11.19.2-2. These sources were installed prior to the applicability date of NSPS Subpart OOO.

Specific Conditions

273. The permittee shall not exceed the emission limits set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

SN	Source Name	Pollutant	lb/hr	tpy
Q3	Transfer from Belt 2N to Belt 1N	PM_{10}	0.1	0.4
Q4	Transfer from Belt 1N to Tripper Belt	PM_{10}	0.1	0.4
Q5	Discharge from Tripper Belt to Chalk Storage	PM_{10}	0.1	0.4
Q6	Scraper Dumping to Auxiliary Crusher	PM_{10}	0.1	0.2
Q7	Hopper 3 Discharge to 1.12 Belt (Auxiliary System)	PM_{10}	0.1	0.2
Q9	Discharge from Belt 1 to Tripper Belt (Auxiliary System)	PM_{10}	0.1	0.2

274. The permittee shall not exceed the emission rates set forth in the following table. Compliance is based on the maximum capacity of the equipment and continuous operation. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Source Name	Pollutant	lb/hr	tpy
Q3	Transfer from Belt 2N to Belt 1N	PM	0.1	0.4
Q4	Transfer from Belt 1N to Tripper Belt	PM	0.1	0.4
Q5	Discharge from Tripper Belt to Chalk Storage	PM	0.1	0.4
Q6	Scraper Dumping to Auxiliary Crusher	PM	0.1	0.2

SN	Source Name	Pollutant	lb/hr	tpy
Q7	Hopper 3 Discharge to 1.12 Belt (Auxiliary System)	PM	0.1	0.2
Q9	Discharge from Belt 1 to Tripper Belt (Auxiliary System)	PM	0.1	0.2

275. Visible emissions from this source shall not exceed 20% opacity. Compliance shall be demonstrated through compliance with Plantwide Condition #10. [§19.501 of Regulation 19 and 40 CFR part 52, Subpart E]

SN-Q8
Auxiliary Crusher

Source Description

This crusher serves as a backup to SN-Q2.

Specific Conditions

276. The permittee shall not exceed the emission limits set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 278. [§19.501 et seq. of Regulation 19 and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
PM_{10}	0.5	2.2

277. The permittee shall not exceed the emission rates set forth in the following table. Compliance shall be demonstrated through compliance with Specific Condition 278. [§18.801 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	1.1	4.7

278. The permittee shall not crush more than 632,400 tons per month at this source. Compliance shall be demonstrated through compliance with Specific Condition 279. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 70.6]

279. The permittee shall maintain records of the amount of material crushed at this source. These records shall be maintained on a monthly basis and updated by the 15th day of the month following the month to which the records pertain. These records shall be kept on site and made available to Department personnel upon request. This source was installed prior to the applicability date of NSPS Subpart OOO. [§19.705 of Regulation 19, §18.1004 of Regulation 18, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311 , and 40 CFR Part 52, Subpart E]

280. Visible emissions from this source shall not exceed 20% opacity. The permittee shall demonstrate compliance with this Specific Condition by conducting a visible opacity observation of the source at least once each calendar week in which the source operates and keep a record of these observations. If visible emissions appear to exceed 20% opacity, the permittee shall take corrective action, and perform and record the observation again. If visible emissions still appear to exceed 20% opacity, the permittee shall conduct

a 6-minute opacity reading in accordance with EPA Reference Method #9. The records of visible emission observations and results of any Method #9 readings shall be kept on site for five years and made available to Department personnel upon request. [§19.501 of Regulation 19 and 40 CFR Part 52, Subpart E]

SECTION V: COMPLIANCE PLAN AND SCHEDULE

Ash Grove Cement Company will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19, §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19, §19.410(B) and 40 CFR Part 52, Subpart E]

3. The permittee must test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) days after completing the testing. [Regulation 19, §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. The permittee must provide: [Regulation 19, §19.702 and/or Regulation 18, §18.1002 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

    c. Sampling ports adequate for applicable test methods;
    d. Safe sampling platforms;
    e. Safe access to sampling platforms; and
    f. Utilities for sampling and testing equipment.

5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19, §19.303 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

7. A treatment process or waste stream is in compliance with the requirements of this subpart and exempt from the requirements of paragraph (c) of this section provided that the owner or operator documents that the treatment process or waste stream is in compliance with other regulatory requirements as follows:

v. The treatment process is a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 264, Subpart O;

vi. The treatment process is an industrial furnace or boiler burning hazardous waste for energy recovery for which the owner or operator has been issued a final permit under 40 CFR Part 270 and complies with the requirements of 40 CFR Part 266, Subpart D.

[A.C.A. §8-4-203 as referenced by A.C.A. §8-4-203 and §3-4-311 and 40 CFR Part 61, Subpart FF, Benzene Waste Operations, §61.348(d)]

8. The facility shall develop and implement a written startup, shutdown, and malfunction plan for those sources indicated as being subject to 40 CFR Part 63, Subpart FF, *National Emission Standards for Hazardous Air Pollutants from Benzene Waste Operations*. The plan shall include those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 of Regulation 19 and 40 CFR 63.6(e)(3)(i)]

9. The permittee is exempted from certain requirements of this subpart, specifically §§ 63.685 (tanks), 63.688 (containers) and 63.693 (closed vent/containment devices) because the unit is subject to equivalent requirements imposed pursuant to 40 CFR 61, Subpart FF, Benzene Waste Operations. [40 CFR Part 63, Subpart DD, *National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations*]

10. Visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for the sources whose Specific Conditions reference this Plantwide Condition. The weekly observations shall be conducted by someone familiar with the facility's visible emissions.

g. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

i. Take immediate action to identify the cause of the visible emissions,
ii. Implement corrective action, and
iii. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9 for point sources and in accordance with EPA Method 22 for non-point sources. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
iv. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

h. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

i. The time and date of each observation/reading any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
ii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
iii. The name of the person conducting the observation/reading.

[§18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

11. This facility is considered an affected source and is subject, but not limited to, the following requirements. The referenced requirements will also include the applicable Subpart EEE NESHAP amendments promulgated by the EPA and as incorporated in the Code of Federal Regulations. Alternatives to the requirements contained in this permit must be approved by the Administrator. Once the Department has received written notification of approval of alternative requirements, the alternate requirements may be implemented. These requirements shall not be in effect for existing affected sources until September 30, 2003, unless an extension of this deadline is granted by the Administrator. [§19.304 of Regulation 19 and 40 CFR 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors*]

Emission Limits

a. The permittee shall not discharge or cause combustion gases to be emitted into the atmosphere that contain Pursuant to §63.1204(a),:
   i. For dioxins and furans:
      1. Emissions in excess of 0.20 ng TEQ/dscm corrected to 7 percent oxygen; or
      2. Emissions in excess of 0.40 ng TEQ/dscm corrected to 7 percent oxygen provided that the combustion gas temperature at the inlet to the initial dry particulate matter control device is 400 °F or lower based on the average of the test run average temperatures;
   ii. Mercury in excess of 120 µg/dscm corrected to 7 percent oxygen;
   iii. Lead and cadmium in excess of 330 µg/dscm, combined emissions, corrected to 7 percent oxygen;
   iv. Arsenic, beryllium, and chromium in excess of 56 µg/dscm, combined emissions, corrected to 7 percent oxygen;
   v. Carbon monoxide and hydrocarbons.

3. For kilns equipped with a by-pass duct or midkiln gas sampling system, either:
    a. Carbon monoxide in the by-pass duct or midkiln gas sampling system in excess of 100 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen, and hydrocarbons in the by-pass duct in excess of 10 parts per million by volume over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane, at any time during the destruction and removal efficiency (DRE) test runs or their equivalent as provided by §63.1206(b)(7); or
    b. Hydrocarbons in the by-pass duct or midkiln gas sampling system in excess of 10 parts per million by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen and reported as propane;
4. For kilns not equipped with a by-pass duct or midkiln gas sampling system, either;
    a. Hydrocarbons in the main stack in excess of 20 ppm by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen, and reported as propane; or
    b. Carbon monoxide in the main stack in excess of 100 ppm by volume, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis and corrected to 7 percent oxygen, and hydrocarbons in the main vent stack in excess of 20 ppm by volume over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7 percent oxygen and reported as propane, at any time during the DRE test runs or their equivalent as provided by §63.1206(b)(7).

vi. Hydrochloric acid and chlorine gas in excess of 130 ppm by volume, combined emissions, expressed as hydrochloric acid equivalents, dry basis, corrected to 7 percent oxygen; and

vii. Particulate matter in excess of 0.15 kg/Mg dry feed and opacity greater than 20 percent.

5. The permittee must use suitable methods to determine the kiln raw material feedrate.

6. Except as provided in paragraph (a)(7)(iii) of this section, the permittee must compute the particulate matter emission rate, E, from the following equation:

   $E = (C_s \times Q_{sd})/P$

   Where:
   E = emission rate of particulate matter, kg/Mg of raw material feed;
   C_s= concentration of particulate matter, kg/dscm
   Q_{sd}= volumetric flowrate of effluent gas, dscm/hr
   P = total kiln raw material feed (dry basis), Mg/hr.
7. If the permittee operates a preheater or preheater/precalciner kiln with dual stacks, they must test simultaneously and compute the combined particulate matter emission rate, E_c, from the following equation:

   $E_c = (C_{sk} \times Q_{sdk} + C_{sb} \times Q_{sdb})/P$

   Where:

   E_c = the combined emission rate of particulate matter from the kiln and bypass stack, kg/Mg of raw material feed;
   C_{sk} = concentration of particulate matter in the kiln effluent, kg/dscm;
   Q_{sdk} = volumetric flowrate of kiln effluent gas, dscm/hr;
   C_{sb} = concentration of particulate matter in the bypass stack effluent, kg/dscm;
   Q_{sdb} = volumetric flowrate of bypass stack effluent gas, dscm/hr;
   P = total kiln raw material feed (dry basis), Mg/hr

Destruction and removal efficiency (DRE) standard

b. Except as provided in paragraph (c)(2) of this section, the permittee must achieve a destruction and removal efficiency of 99.99% for each principle organic hazardous constituent (POHC) designated under paragraph (c)(3) of this section. The permittee must calculate DRE for each POHC from the following equation:

   $DRE = [1-(W_{out}/W_{in})]\times 100\%$
   Where:
   W_{in}=mass feedrate of one POHC in a waste feedstream; and
   W_{out}= mass emission rate of the same POHC present in exhaust emissions prior to release to the atmosphere.

[§63.1204(c)(1)]

c. If the permittee burns dioxin-listed hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27 (see §261.31 of this chapter), the permittee must achieve a DRE of 99.9999% for each POHC that is designated under paragraph (c)(3) of this section. The permittee must demonstrate this DRE performance on POHCs that are more difficult to incinerate than tetro-, penta, and hexachlorodibenzo-p-dioxins and dibenzofurans. The equation in paragraph (c)(1) of this section shall be used to calculate DRE for each POHC. In addition, the permittee must notify the Administrator of the intent to burn hazardous wastes FO20, FO21, FO22, FO23, FO26, or FO27. [§63.1204(c)(2)]

d. The permittee must treat the POHCs in the waste feed that are specified under paragraph (c)(3)(ii) of this section to the extent required by paragraphs (c)(1) and (c)(2) of this section. [§63.1204(c)(3)(i)]

e. The permittee must specify one or more POHCs from the list of hazardous air pollutants established by 42 U.S.C. 7412(b)(1), excluding caprolactam (CAS number 105602) as provided by §63.60, for each waste to be burned. The permittee must base this specification on the degree of difficulty of incineration of the organic constituents in the waste and on their concentration or mass in the waste feed, considering the results of waste analyses or other data and information. [§63.1204(c)(3)(ii)]

Compliance Date:

f. The permittee must comply with the standards set forth in this subpart no later than September 30, 2003 unless the Administrator grants an extension of time under §63.6(i) or §63.1213. [§63.1206(a)(1)]

g. The emission standards and operating requirements set forth in this subpart apply at all times except:
   i. During startup, shutdown, and malfunction, provided that hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period time not less than the hazardous waste residence time) during those periods of operation, as provided by paragraph (c)(2)(ii) of this section; and
   ii. When hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period time not less than the hazardous waste residence time) , and the permittee has
      1. submitted a written, one-time notice to the Administrator documenting compliance with all applicable requirements and standards promulgated under authority of the Clean Air Act, including sections 112 and 129; and

2. Documented in the operating record that you are complying with such applicable requirements in lieu of the emission standards and operating requirements of this subpart.

[§63.1206(b)(1)]

Applicability of particulate matter and opacity standards during particulate matter correlation tests

h. Any particulate matter and opacity standards or any permit or other emissions operating parameter limits or conditions, including any limitation on workplace practices, that are applicable to hazardous waste combustors to insure compliance with any particulate matter or opacity standard of parts 60, 61, 63, 264, 265, and 266 of this chapter (i.e., any title 40 particulate or opacity standards) applicable to hazardous waste combustor do not apply while the permittee conducts particulate matter continuous emissions monitoring system (CEMS) correlation tests. [§63.1206(b)(8)(i) and (ii)]

i. For provisions of this section to apply, the permittee must develop a particulate matter CEMS correlation test plan that includes the following information. This test plan may be included as part of the comprehensive performance test plan required under §§63.1207(e) and (f):
   i. Number of test conditions and number of runs for each test condition;
   ii. Target particulate matter emission level for each test condition;
   iii. How you plan to modify operations to attain the desired particulate matter emission levels; and
   iv. Anticipated normal emission levels; and
   v. Submit the test plan to the Administrator for approval at least 90 calendar days before the correlation test is scheduled to be conducted.

[§63.1206(b)(8)(iii)(A) and (B)]

j. If the Administrator fails to approve or disapprove the correlation test plan with the time period specified by §63.7(c)(3)(i), the plan is considered approved, unless the Administrator has requested additional information. [§63.1206(b)(8)(iv)]

k. The particulate matter and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for a correlation test, including all runs of all test conditions, unless more time is approved by the Administrator. [§63.1206(b)(8)(v)]

l. The permittee must return to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed. [§63.1206(b)(8)(vii)]

Alternative Standards for Existing Hazardous Waste Burning Cement Kilns Using MACT

m. The permittee may petition the Administrator to recommend alternative semivolatile, low volatile metal, mercury, and/or hydrochloric acid/chlorine gas emission standards if:
   i. The permittee cannot achieve one or more of the standards while using MACT because of raw material contributions to emissions of the regulated metals or hydrochloric acid/chlorine gas; or
   ii. The permittee determines that mercury is not present at detectable levels in the raw material.

[§63.1206(b)(10)(i)]

n. The alternative standard recommended under paragraph (b)(10)(i)(A) of this section may be an operating requirement, such as a hazardous waste feedrate limitation for metals and/or chlorine and/or an emission limitation. [§63.1206(b)(10)(ii)]

o. The alternative standard must include a requirement to use MACT, or better, applicable to the standard for which the source is seeking relief, as defined in paragraphs (b)(10)(viii) and (ix) of this section. [§63.1206(b)(10)(iii)]

p. The alternative standard petitions submitted under this section must include data or information required by this section. [§63.1206(b)(10)(iv)(A) through §63.1206(b)(10)(ix)(D)]

Calculation of hazardous waste residence time

q. The permittee must calculate the hazardous waste residence time and include the calculation in the performance test plan under §63.1207(f) and the operating record. The permittee must also provide the hazardous waste residence time in the Documentation of Compliance under §63,1211(d) and the Notification of Compliance under §§63.1207(j) and 63.1210(d). [§63.1206(b)(11)]

Documenting compliance with the standard based on performance testing

r. The permittee must conduct a minimum of three runs of a performance test required under §63.1207 to document compliance with the emission standards of this subpart. [§63.1206(b)(12)(i)]

s. The permittee must document compliance with the emission standards based on the arithmetic average of the emission results of each run, except that the permittee must document compliance with the destruction and removal efficiency standard for each run of the comprehensive performance test individually. [§63.1206(b)(12)(ii)]

Cement kilns which feed hazardous waste at a location other than the end where products are normally discharged and where fuels are normally fired.

t. Cement kilns that feed hazardous waste at a location other than the end where products are normally discharged and where fuels are normally fired must comply with the carbon monoxide and hydrocarbon standards of §63.1204 as follows:

i. Existing sources must comply with the 20 parts per million by volume hydrocarbon limit, over an hourly rolling average (monitored continuously with a continuous emissions monitoring system), dry basis, corrected to 7% oxygen, and reported as propane.

[§63.1206(b)(13)(i)]

General Operating Requirements

u. The permittee must operate only under the operating requirements specified in the Documentation of Compliance under §63.1211(d) or the Notification of Compliance under §§63.1207(j) and 63.1210(d), except:

i. During performance tests under approved test plans according to §63.1207(e), (f), and (g), and [§63.1206(c)(1)(i)(A)]

ii. Under the conditions of paragraph (b)(1)(i) or (ii) of this section [§63.1206(c)(1)(i)(B)(i)]

1. The Documentation of Compliance and the Notification of Compliance must contain operating requirements including, but not limited to, the operating requirements of this section and §63.1209. [§63.1206(c)(1)(i)(B)(ii)]
2. Failure to comply with the operating requirements is failure to ensure compliance with the emissions standards of this subpart. [§63.1206(c)(1)(i)(B)(iii)]
3. Operating requirements in the Notification of Compliance are applicable requirements for purposes of parts 70 and 71 of this chapter. [§63.1206(c)(1)(i)(B)(iv)]
4. The operating requirements specified in the Notification of Compliance will be incorporated in the Title V permit. [§63.1206(c)(1)(i)(B)(v)]

[§63.1206(c)(1)(i)]

v. Except as provided in by paragraph (c)(2)(ii) of this section, the permittee is subject to the startup, shutdown, and malfunction plan requirements of §63.6(e)(3).

i. The permittee is subject to the startup, shutdown, and malfunction plan requirements of §63.6(e)(3) even if the permittee follows the startup and shutdown procedures and the corrective measures upon malfunction that are prescribed in the startup, shutdown, and malfunction plan, the emission combustion chamber. [§63.1206(c)(2)(ii)]
ii. The permittee must identify in the plan the projected oxygen correction factor based on normal operations to use during periods of startup and shutdown. [§63.1206(c)(2)(iii)]
iii. The permittee must record the plan in the operating record. [§63.1206(c)(2)(iv)]

[§63.1206(c)(2)(i)]

w. Upon the compliance date, the permittee must operate the combustor with a functioning system that immediately and automatically cuts off the hazardous waste feed, except as provided by paragraph (c)(3)(viii) of this section, when the following conditions apply:

i. When operating parameter limits specified under §63.1209; an emission standard monitored by CEMS; and the allowable combustion chamber pressure; [§63.1206(c)(3)(i)(A)]
ii. When the span value of any CMS detector, except a CEMS, is met or exceeded; [§63.1206(c)(3)(i)(B)]
iii. Upon malfunction of a CMS monitoring an operating parameter limit specified under §63.1209 or an emission level; or [§63.1206(c)(3)(i)(C)]
iv. When any component of the automatic waste feed cutoff system fails. [§63.1206(c)(3)(i)(D)]

[§63.1206(c)(3)(i)]

x. During an automatic waste feed cutoff (AWFCO) the permittee must continue to duct combustion gases to the air pollution control system while hazardous waste remains in the combustion chamber. [§63.1206(c)(3)(ii)]

y. The permittee must continue to monitor during the cutoff the operating parameters for which limits are established under §63.1209 and the emissions required under that section to be monitored by a CEMS, and the permittee shall not restart the hazardous waste feed until the operating parameters and emission levels are within specified limits. [§63.1206(c)(3)(iii)]

z. If the AWFCO system fails to automatically and immediately cutoff the flow of hazardous waste upon exceedance of a parameter required to be interlocked with the AWFCO system under paragraph (c)(3)(i) of this section, the permittee has failed to comply with the AWFCO requirements of paragraph (c)(3) of this section. [§63.1206(c)(3)(iv)]

aa. If, after any AWFCO, there is an exceedance of any emission standard or operating requirement, irrespective of whether the exceedance occurred while hazardous waste remained in the combustion chamber, the permittee shall investigate the cause of the AWFCO, take appropriate corrective measures to minimize future AWFCOs and record the findings and corrective measures in the operating record. [§63.1206(c)(3)(v)]

bb. For each set of 10 exceedances of an emissions standard or operating requirement while hazardous waste remains in the combustion chamber during a 60-day block period, the permittee must submit to the Administrator a written report within 5 calendar days of the 10^{th} exceedance documenting the exceedances and the results of the investigation and corrective measures taken. [§63.1206(c)(3)(vi)(A)]

cc. On a case-by-case basis, the Administrator may require excessive exceedance reporting when fewer than 10 exceedances occur during a 60-day block period. [§63.1206(c)(3)(vi)(B)]

dd. The AWFCO system and associated alarms must be tested at least weekly to verify operability, unless the permittee documents in the operating record that weekly inspections will unduly restrict or upset operations and that less frequent inspection will be adequate. At a minimum, the permittee must conduct operability testing at least monthly. The permittee must document and record in the operating record AWFCO operability test procedures and results. [§63.1206(c)(3)(vii)]

ee. The permittee shall use a COMS to demonstrate and monitor compliance with the opacity standard under §§63.1204(a)(7) and (b)(7) at each point where emissions are vented from these affected sources including the bypass stack of a preheater/precalciner kiln with dual stacks. [§63.1209(a)(1)(ii)]

ff. The permittee is subject to the combustion system leak control system operating and reporting requirements set forth in this section. [§63.1206(c)(5)(i through ii)]

gg. The permittee is subject to the operator training and certification standards set forth in this section. [§63.1206(c)(6)(i through v)]

hh. The permittee must prepare and at all times operate according to an operation and maintenance plan which complies with the requirements set forth in these sections. [§63.1206(c)(7)(i)(A-D)]

Performance Testing Requirements

ii. The permittee must conduct performance testing in accordance with the applicable requirements contained in this section. [§63.1207(a-n)]

jj. The permittee must commence the initial comprehensive performance test not later than six months after the compliance date. [§63.1207(c)(1)]

kk. The permittee may request that previous emissions test data serve as documentation of conformance with the emission standards of this subpart provided that the previous testing:

i. Results in data that meet quality assurance objectives (determined on a site-specific basis) such that the results adequately demonstrate compliance with the applicable standard;
ii. Was in conformance with the requirements of paragraph (g)(1) of this section; and,
iii. Was sufficient to establish the applicable operating parameter limits under §63.1209.

[§63.1207(C)(2)(i)]

ll. The permittee must conduct testing periodically as described in paragraphs (d)(1) through (3) of this section. The date of commencement of the initial comprehensive performance test is the basis for establishing the deadline to commence the initial confirmatory performance test and the next comprehensive performance test. The permittee may conduct performance testing at any time prior to the required date. The deadline for commencing subsequent confirmatory and comprehensive performance testing is based on the date of commencement of the previous comprehensive performance test.

i. The permittee must commence testing no later than 61 months after the date of commencing the previous comprehensive performance test.
ii. The permittee must commence confirmatory performance testing no later than 31 months after the date of commencing the previous comprehensive performance test. To insure that the confirmatory test is conducted approximately midway between comprehensive performance tests, the Administrator will not approve a test plan that schedules testing within 18 months of commencing the previous comprehensive performance test.
iii. The permittee must complete performance testing within 60 days after the date of commencement, unless the Administrator determines that a time extension is warranted based on documentation in writing of factors

beyond the permittee's control that prevent testing from being completed within 60 days.

[§63.1207(d)(1) through (3)]

mm. The permittee must submit to the Administrator a notification of intent to conduct a comprehensive performance test and CMS performance evaluation and a site specific test plan and CMS performance evaluation plan at least one year before the performance test and performance evaluation are scheduled to begin. [§63.1207(e)(i)]

nn. The permittee must submit to the Administrator a notification of intent to conduct the comprehensive performance test at least 60 calendar days before the test is scheduled to begin. [§63.1207(e)(i)(B)]

oo. The permittee must submit to the Administrator a notification of intent to conduct a confirmatory performance test and CMS performance evaluation and a test plan and CMS performance evaluation plan at least 60 calendar days before the performance test is scheduled to begin. [§63.1207(e)(ii)]

Test Methods

pp. The permittee shall use the test methods contained in this section when determining compliance with the emissions standards of this subpart. [§63.1208(a-b)]

Monitoring Requirements

qq. The permittee is subject to the applicable monitoring requirements contained in these sections. [§63.1209 (a-q)]

rr. The permittee must use a CEMS to demonstrate and monitor compliance with the carbon monoxide and hydrocarbon standards under this subpart. The permittee must also use an oxygen CEMS to continuously correct the carbon monoxide and hydrocarbon levels to 7 percent oxygen. [§63.1209(a)(1)(i)]

ss. The permittee must install, calibrate, maintain, and operate a particulate matter CEMS to demonstrate and monitor compliance with the particulate matter standards under this subpart. However, compliance with the requirements in their section to install, calibrate, maintain, and operate the PM CEMS is not required until such time that the Agency promulgates all performance specifications and operational requirements applicable to PM CEMS. [§63.1209(a)(1)(iii)]

tt. The permittee must install, calibrate, maintain, and continuously operate the COMS and CEMS in compliance with the quality assurance procedures provided in the appendix to this subpart and Performance Specifications 1 (opacity), 4B (carbon monoxide and oxygen), and 8A (hydrocarbons) in Appendix B, Part 60 of this chapter. [§63.1209(a)(2)]

uu. Prior to feeding the material, the permittee must obtain an analysis of each feedstream that is sufficient to document compliance with the applicable feedrate limits provided in this section. [§63.1209(c)(1)]

vv. The permittee must develop and implement a feedstream analysis plan and record it in the operating record. [§63.1209(c)(2)]

ww. The permittee must submit the feedstream analysis plan to the Administrator for review and approval, if requested. [§63.1209(c)(3)]

xx. To comply with the applicable feedrate limits of this section, the permittee must monitor and record the feedrates as follows:

i. Determine and record the value of the parameter for each feedstream by sampling and analysis or other method;
ii. Determine and record the mass or volume flowrate of each stream by a CMS. If the permittee determines flowrate of a feedstream by volume, the permittee must determine and record the density of the feedstream by sampling and analysis (unless the permittee reports the constituent concentration in units of weight per volume); and
iii. Calculate and record the mass feedrate of the parameter per unit time.

[§63.1209(c)(4)]

yy. The requirements of §§63.8(d) (Quality control program) and (e) (Performance evaluation of continuous monitoring systems) apply, except that the permittee must conduct performance evaluations components of the CMS under the frequency and procedures (for example, submittal of performance evaluation test plan for review and approval) applicable to performance tests as provided by §63.1207. [§63.1209(d)(1)]

zz. To remain in compliance with the destruction and removal efficiency (DRE) standards, the permittee must establish operating limits during the comprehensive performance test (or during a previous DRE test under provisions of §63.1206(b)(7)) for the following parameters, unless the limits are based on manufacturer specifications and comply with those limits at all times that hazardous waste remains in the combustion chamber. [§63.1209(j)]

aaa. The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the

combustion zone. The permittee must document the temperature measurement location in the test plan submitted under §63.1207(e). [§63.1209(j)(1)(i)]

bbb. As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate, or another parameter that is documented in the site-specific test plan as an appropriate surrogate for gas residence time, as the average of the maximum hourly rolling averages for each run. [§63.1209(j)(2)(i)]

ccc. The permittee must establish limits on the maximum pumpable and total (i.e., pumpable and nonpumpable) hazardous waste feedrate for each location where hazardous waste is fed. [§63.1209(j)(3)(i)]

ddd. The permittee must specify operating parameters and limits to insure that good operation of each hazardous waste firing system is maintained. [§63.1209(j)(4)]

eee. The permittee must comply with the dioxin and furans emission standard by establishing and complying with the following operating parameter limits. You must base the limits on operations during the comprehensive performance test, unless the limits are based on manufacturer specifications. [§63.1209(k)]

fff. The permittee must establish a limit on the maximum temperature of the gas at the inlet to the device on an hourly rolling average. The permittee must establish the hourly rolling average limit as the average of the test run averages. [§63.1209(k)(1)(i)]

ggg. The permittee must measure the temperature of each combustion chamber at a location that best represents, as practicable, the bulk gas temperature in the combustion zone. The permittee must document the temperature measurement location in the test plan. [§63.1209(k)(2)(i)]

hhh. As an indicator of gas residence time in the control device, the permittee must establish and comply with a limit on the maximum flue gas flowrate, the maximum production rate , or another parameter which is an appropriate surrogate for residence time. [§63.1209(k)(3)(i)]

iii. The permittee must establish limits on the maximum pumpable and total (pumpable and nonpumpable) waste feedrate for each location where waste is fed. [§63.1209(k)(4)(i)]

jjj. The permittee must comply with the particulate matter emission standard by establishing and complying with the operating parameter limits found in §63.1209(m) of this subpart. [§63.1209(m)]

kkk. If the combustor is equipped with a baghouse, the permittee must establish a limit on the minimum pressure drop and the maximum pressure drop across each baghouse cell based on manufacturer's specifications. The permittee must comply with the limit on an hourly rolling average. [§63.1209(m)(1)(ii)]

lll. The permittee must comply with the semivolatile metal (cadmium and lead) and low volatile metal (arsenic, beryllium, and chromium) emission standards by establishing and complying with the following operating parameter limits.

i. The permittee must establish a limit on the maximum inlet temperature to the primary dry metals emissions control device on an hourly rolling basis as the average of the test run averages. [§63.1209(n)(1)]
ii. The permittee must establish feedrate limits for semivolatile metals and low volatile metals. [§63.1209(n)(2)(i)]
iii. The permittee must establish operating parameter limits on the particulate matter control device as specified by paragraph 63.1209(m)(1). [§63.1209(n)(3)]
iv. The permittee must establish a 12-hour rolling average limit for the feedrate of total chlorine and chloride in all feedstreams as the average of the average hourly rolling averages for each run. [§63.1209(n)(4)]

[§63.1209(n)]

mmm. If the permittee complies with the requirements for combustion system leaks under §63.1206(c)(5) by maintaining combustion chamber zone pressure lower than ambient pressure, the permittee must monitor the pressure instantaneously and the automatic waste feed cutoff system must be engaged when negative pressure is not maintained at any time. [§63.1209(p)]

Notification Requirements

nnn. The permittee shall submit all of the applicable notifications prior to the deadlines established in this subpart. [§63.1210(a)(1)]

ooo. The permittee must submit the required notifications outlined in this section to the Administrator in order to request or elect to comply with the alternative requirements contained in this subpart. [§63.1210(a)(2)]

ppp. Upon postmark of the Notification of Compliance, the operating parameter limits identified in the Notification of Compliance, as applicable, shall be complied with, the limits identified in the Document of Compliance or a previous Notification of Compliance are no longer applicable. [§63.1210(d)(2)]

Recordkeeping and Reporting Requirements

qqq. The permittee shall submit the reports required by this subpart to the Administrator prior to the deadlines set forth in this subpart. [§63.1211]

Procedure for Extending the Compliance Date

rrr. The permittee may request an extension of the compliance date to install pollution prevention or waste minimization controls provided that the conditions outlined in this section are met. [§63.1213]

12. This facility is considered an affected facility and is subject, but not limited to, the following requirements. The referenced requirements will also include the applicable Subpart LLL NESHAP amendments promulgated by the EPA and as incorporated in the Code of Federal Regulations. [§19.304 of Regulation 19 and 40 CFR Part 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry*]

Standards for kilns

a. The permittee shall not cause to be discharged into the atmosphere from these affected sources any gases which:
   i. Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.
   ii. Exhibit opacity greater than 20 percent.
   iii. Contain D/F in excess of:
      1. 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ) corrected to seven percent oxygen; or
      2. 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

   [§63.1343(b)]

b. A kiln subject to the D/F limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. [§63.1344(a)]

c. The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.149(b)(3)(iv). [§63.1344(b)]

Standards for Clinker Coolers

d. The permittee shall not cause to be discharged into the atmosphere from any clinker cooler any gases which:
   i. Contain particulate matter in excess of 0.050 kg per Mg (0.10 lb per ton) of feed (dry basis) to the kiln.
   ii. Exhibit opacity greater than 10 percent.

[§63.1345(a)]

Standards for Raw and Finish Mills

e. The permittee shall not cause to be discharged from the mill sweep or air separator air pollution control devices for each finish mill any gases which exhibit opacity in excess of ten percent. [§63.1347]

Standards for affected sources other than kilns; in-line kilns/raw mills; new and reconstructed raw material dryers; and raw and finish mills

f. The owner or operator of each new or existing raw material, clinker or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provision of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent. [§63.1348]

Performance testing requirements

g. The permittee shall use the test methods and procedures contained in this section to demonstrate compliance with the emissions limits set forth by this subpart. [§63.1349]

Monitoring requirements

h. The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The permittee shall also comply with all applicable monitoring requirements contained in this section. [§63.1350]

Compliance dates

i. Existing sources shall comply with this subpart no later than June 14, 2002. [§63.1351(a)]

j. The compliance date for new construction or reconstruction after March 24, 1998 is immediately upon start of operations. [§63.1351(b)]

Notification requirements

k. The permittee shall comply with all applicable notification requirements set forth in this section. [§63.1353(a)]

Reporting Requirements

l. The permittee shall comply with all applicable reporting requirements set forth in this section. [§63.1354(a)]

Recordkeeping Requirements

m. The permittee shall comply with all applicable recordkeeping requirements set forth in this section. [§63.1355(a)]

13. The facility shall develop and implement a written startup, shutdown, and malfunction plan for sources subject to 40 CFR 63, Subpart EEE, *National Emission Standards for Hazardous Air Pollutants From Hazardous Waste Combustors*. The plan shall include those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 and 40 CFR 63.6(e)(3)(i)]

14. The facility shall develop and implement a written startup, shutdown, and malfunction plan for sources subject to 40 CFR 63, Subpart LLL, *National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry*. The plan shall include those items listed in 40 CFR 63.6(e)(3) et seq. The plan shall be maintained on site and be available to Department personnel upon request. [§19.304 and 40 CFR 63.6(e)(3)(i)]

15. The visible emission observations shall be used as a method of compliance verification for the opacity limits assigned for the sources whose Specific Conditions reference this Plantwide Condition. The monthly observations shall be conducted by someone familiar with the facility's visible emissions.

n. If during the observations, visible emissions are detected which appear to be in excess of the permitted opacity limit, the permittee shall:

iii. Take immediate action to identify the cause of the visible emissions,

iv. Implement corrective action, and
v. If excessive visible emissions are still detected, an opacity reading shall be conducted in accordance with EPA Reference Method 9. This reading shall be conducted by a person trained and certified in the reference method. If the opacity reading exceeds the permitted limit, further corrective measures shall be taken.
vi. If no excessive visible emissions are detected, the incident shall be noted in the records as described below.

o. The permittee shall maintain records related to all visible emission observations and Method 9 readings. These records shall be updated on an as-performed basis. These records shall be kept on site and made available to Department personnel upon request. These records shall contain:

vii. The time and date of each observation/reading any observance of visible emissions appearing to be above permitted limits or any Method 9 reading which indicates exceedance,
viii. The cause of any observed exceedance of opacity limits, corrective actions taken, and results of the reassessment, and
ix. The name of the person conducting the observation/reading.

[§18.1004 of Regulation 18, 40 CFR Part 63, Subpart LLL and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

16. The permittee may choose to comply with the emission standards set forth in 40 CFR part 63, Subpart LLL when hazardous waste is not in the combustion chamber (i.e., the hazardous waste feed to the combustor has been cutoff for a period time not less than the hazardous waste residence time). The permittee must document in the facility record when they are operating under 40 CFR 63, Subpart LLL. These records shall be maintained on site and made available to Department personnel upon request. [§19.304 of Regulation 19, and 40 CFR Part 63, Subpart EEE, §63.1206(b)(1)]

Title VI Provisions

17. The permittee must comply with the standards for labeling of products using ozone-depleting substances. [40 CFR Part 82, Subpart E]

p. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
q. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
r. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.

s. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.

18. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]

t. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
u. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
v. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
w. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
x. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
y. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

19. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.

20. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

21. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

Permit Shield

22. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated October 1996, as amended in September 1997, December 1998, April 1999, and October 2000.

Applicable Regulations

Source No.	Regulation	Description
F19, F20	40 CFR 60, Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984
P1, P2, P3	40 CFR 63, Subpart EEE	Emission Standards for Hazardous Waste Combustors
P5, P6, P8, P10, P11, P12, P13, P15, P16, P17, P18, P19, P20, P26, P27, P28, P29, P30, P31, M1, M3, M4, M8, M9, M10, M11, M12, M13, M14, M15, M16, M17, M18, M19, M20, M21, M22, M23, M24, M25, M26, M27, M28, M29, M30, M31, M32, M33, M34, M35, M36, M37, M38, M39, M40, M42, M43, M44, M45, S1, S3-S13, C1-C11, C13-C21, C26-C28, C32-C37, C41-C44	40 CFR 63, Subpart LLL	Emission Standards for Portland Cement Plants
F19, F20 Facility	40 CFR 61, Subpart FF 40 CFR 63, Subpart DD	Benzene Waste Operations
Facility	Arkansas Regulation 19	Compilation of Regulations of the Arkansas State Implementation Plan for Air Pollution Control

Source No.	Regulation	Description
Facility	Arkansas Regulation 26	Regulations of the Arkansas Operating Air Permit Program

The permit specifically identifies the following as inapplicable based upon information submitted by the permittee in an application dated October 1996, as amended September 1997, December 1998, and April 1999.

Inapplicable Regulations

Description of Regulation	Regulatory Citation	Affected Source	Basis for Determination
New Source Performance Standards	40 CFR 60, Subpart F	P1, P2, P3, P6, M16, M17, M18, M19, M20, M42, M43, M44, S4, S6, S7, S8, S9, S10, S11, S12, S13, C13, C14, C18	Units were constructed prior to the effective date of the subpart
New Source Performance Standards	40 CFR 60, Subpart Y	P4, P7, P9, P24	Final Direct Rule (April 5, 2002) [FR-7168-1]
New Source Performance Standards	40 CFR 60, Subpart OOO	Facility	Sources installed before applicability date or subject to Subpart F are exempt from OOO.
National Emission Standards for Hazardous Air Pollutants	40 CFR 61, Subpart DD	Facility	Facility subject to FF exempt from requirements of this subpart.

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated October 30, 2000. [Regulation 26, §26.304]

Description	Category
Piles associated with clean-up	Group A, #13
Auxiliary drive to turn kilns	Group A, #13
11,000 gallon oil tank	Group A, #13
11,000 gallon oil tank	Group A, #13
250 gallon fuel tank	Group A, #2
10,000 gallon diesel UST	Group A, #3
10,000 gallon unleaded UST	Group A, #13
8,000 diesel tank	Group A, #3
600 gallon tank	Group A, #3

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]

2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26), effective August 10, 2000]

3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26, §26.406]

4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26, §26.701(A)(2)]

5. The permittee must maintain the following records of monitoring information as required by this permit. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]

    g. The date, place as defined in this permit, and time of sampling or measurements;
    h. The date(s) analyses performed;
    i. The company or entity performing the analyses;
    j. The analytical techniques or methods used;
    k. The results of such analyses; and
    l. The operating conditions existing at the time of sampling or measurement.

6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample,

measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26, §26.701(C)(2)(b)]

7. The permittee must submit reports of all required monitoring every six (6) months. If permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.

a. For all upset conditions (as defined in Regulation19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report my be made by telephone and shall include:

x. The facility name and location
xi. The process unit or emission source deviating from the permit limit,
xii. The permit limit, including the identification of pollutants, from which deviation occurs,
xiii. The date and time the deviation started,
xiv. The duration of the deviation,
xv. The average emissions during the deviation,
xvi. The probable cause of such deviations,
xvii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future, and
xviii. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The

permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19, §19.601 and §19.602, Regulation 26, §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26, §26.701(E), and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26, §26.701(F)(1)]

11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26, §26.701(F)(2)]

12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26, §26.701(F)(3)]

13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26, §26.701(F)(4)]

14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director

along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26, §26.701(F)(5)]

15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26, §26.701(G)]

16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26, §26.701(H)]

17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26, §26.701(I)(1)]

18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26, §26.702(A) and (B)]

19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26, §26.703(A)]

20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26, §26.703(B)]

    e. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
    f. Have access to and copy, at reasonable times, any records required under the conditions of this permit;
    g. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
    h. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.

21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually within 30 days following the last day of the anniversary month of the initial Title V permit. The permittee must also

submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26, §26.703(E)(3)]

a. The identification of each term or condition of the permit that is the basis of the certification;
b. The compliance status;
c. Whether compliance was continuous or intermittent;
d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit;
e. and Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.

22. Nothing in this permit will alter or affect the following: [Regulation 26, §26.704(C)]

c. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
d. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
e. The applicable requirements of the acid rain program, consistent with §408(a) of the Act or,
f. The ability of EPA to obtain information from a source pursuant to §114 of the Act.

23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]