Memorandum

Florida Department of Environmental Protection

TO:

Joseph H. Kahn, Director DARM

Through:

Trina L. Vielhauer, Chief BAR

From:

A.A. Linero, P.E., PA/Cindy Mulkey South Permitting Section

DATE:

December 18, 2006

SUBJECT:

CEMEX Cement, Inc. – Brooksville Cement Plant

DEP File No. 0530010-026-AC

Attached is the Final Permit authorizing installation of <u>indirect firing</u> systems, including (after the fact) burner replacements, on Kilns 1 and 2 at the existing CEMEX Cement Plant in Brooksville. We included in this action their unprocessed (after the fact) request for installation of selective non-catalytic reduction (SNCR) systems on both kilns.

The new indirect firing system makes it possible to use less moist, cool air from the coal mill as primary air in the main kiln burner and allows greater use of hot secondary air from the kiln hood/clinker cooler. The new burner design is an integral part of the indirect firing system and is consistent with the principles of a "Low NO_X " kiln burner.

In principle the net overall effect of the indirect firing system and new burners should be less fuel consumption. The burner can provide greater combustion control. We would expect the same or lower kiln emissions of all pollutants, if all other factors are equal. There will be a small increase in PM/PM₁₀ due to six new emission points for baghouses related to pulverized coal/air conveyance and separation.

The SNCR systems (already installed) provide CEMEX with the ability to comply with their present NO_X limits (and lower) following their installation of <u>semi-direct firing</u> systems with new kiln burners (accomplished without permits).

The applicant submitted information for the indirect firing project showing there will not be significant emission increases on the basis of "past actual to future actual" emissions. However, the applicant had already submitted an earlier request for the pre-installed SNCR and semi-direct firing projects based on the "past actual to future potential" emissions test for PSD applicability. That submittal indicated it is necessary to reduce the NO_X emission limits to avoid PSD and a BACT determination. Because they installed the systems when the previous rules were applicable, we drafted this permit with a NO_X limitation of 1.21 lb/ton of preheater feed (~2.0 lb/ton clinker) based on the previous PSD rules.

Because SO₂ emissions are minimal from cement kilns in Florida, very little particulate matter can be formed by reaction with excess NH₃ emissions (slip). Although there is no reason to inject as much NH₃ as it takes to react with all NO_X, the Department will limit the maximum NH₃ injection rate to that level, at a molar ratio of 1.0 as a further precaution to ensure minimal particulate formation. According to the applicant, for a reduction from 4.0 to 2.0 lb/ton of clinker, the required molar ratio is in the range of 0.6-0.7.

We may need to set BACT or PSD avoidance limitations on other pollutants upon completion of tire or petcoke usage trials.

We determined that the indirect firing project does not trigger PSD on the basis of base-line actual to future actual emissions information provided by CEMEX.

We recommend your approval of the attached Final Permit.

AAL/cm

Attachments

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF PERMIT

In the Matter of an Application for Permit by:

Mr. Michael A. Gonzales, Plant Manager CEMEX Cement, Inc. P.O. Box 6 Brooksville, Florida 34605-0006 DEP File No. 0530010-026-AC Brooksville Cement Plant Kilns No. 1 and No. 2 Hernando County

Enclosed is the Final Permit, number 0530010-026-AC, authorizing the installation of indirect firing systems and afterthe-fact installation of selective non-catalytic reduction (SNCR) systems on Kilns 1 and 2 at the existing Brooksville Cement Plant northwest of Brooksville in Hernando County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

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CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) and all copies were sent electronically (with Received Receipt) before the close of business on the person(s) listed:

Michael A. Gonzales, CEMEX: michaelanthony.gonzales@cemexusa.com

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Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Date)



Department of Environmental Protection

Jeb Bush Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Colleen M. Castille Secretary

PERMITTEE:

CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Authorized Representative:
Michael A. Gonzales, Plant Manager

DEP File No. 0530010-026-AC
Brooksville Cement Plant Kilns 1 and 2
SNCR and Indirect Firing Systems
Hernando County, Florida
Expiration date: June 30, 2007

PROJECT AND LOCATION

This permit authorizes installation of indirect firing systems, including after-the-fact authorization for burner replacements on Kilns I and 2, and installation of selective non-catalytic reduction systems on Kilns I and 2 at CEMEX Cement's Brooksville portland cement plant. For each kiln, the indirect firing system will also require the installation of an additional coal mill baghouse, a pulverized coal bin with associated baghouse, and a pump with associated baghouse. The transition to the indirect firing systems may involve replacement of, or modifications to, the burners currently in operation. The existing plant is located on Highway 98, northwest of Brooksville, in Hernando County, Florida.

STATEMENT OF BASIS

This permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department). This permit supplements all other air construction and operation permits for the affected emissions units and does not alter any requirements from such previously issued air permits.

The attached Appendices are made a part of this permit:

Appendix GC

Construction Permit General Conditions

Appendix SC

Standard Conditions

Joseph Kahn, Director

Division of Air Resource Management

FACILITY DESCRIPTION

The existing facility consists of two Polysius GEPOL preheater kilns (Kilns 1 and 2), two clinker coolers and associated raw mills, finish mills, cement and clinker handling equipment, coal handling equipment, silos, and air pollution control devices. The nominal capacity of each kiln is 780,000 ton per year of clinker. The plant is located on Highway 98, northwest of Brooksville in Hernando County, Florida.

PROJECT DESCRIPTION

The projects under this permit include installation of indirect firing systems and selective non-catalytic reduction (SNCR) systems on Kilns 1 and 2. The indirect firing system project includes previous replacement of the older generation kiln burners with multi-channel burners, and the cyclones, fans, and fuel injectors associated with the indirect firing systems on Kilns 1 and 2. Modification to, or replacement of, the burners currently in operation may be necessary for completion of the indirect firing system. This project also authorizes the installation of an additional coal mill baghouse, a pulverized coal bin with associated baghouse, and one FK pump with associated baghouse all of which are needed to change to the indirect firing system on each kiln.

The SNCR project utilizes injection of ammonia solutions near the lowest part of the preheater. The equipment consists of a storage tank, piping, pumps, compressed air and one or more injectors.

EMISSIONS UNITS

This permit addresses the following emissions units:

EU ID	Emissions Unit Description
003	Cement Kiln No. 1
014	Cement Kiln No. 2
032	Coal Grinding and Transferring

REGULATORY CLASSIFICATION

Title I, Section 111, Clean Air Act (CAA): This facility is subject to certain Standards of Performance for New Stationary Sources. They are adopted and incorporated by reference in Rule 62-204.800, F.A.C. These inleude:

- 40 CFR 60, Subpart A General Provisions.
- 40 CFR 60, Subpart F Standards of Performance for Portland Cement Plants. Certain requirements from Subpart F are replaced by requirements from 40 CFR 63, Subpart LLL listed below.
- 40 CFR 60, Subpart Y Standards of Performance for Coal Preparation Plants.
- 40 CFR 60, Subpart OOO New Source Performance Standards For Nonmetallic Mineral Processing Plants.

Title I, Section 112 CAA: The facility has the potential to emit 10 tons per year or more of any one hazardous air pollutant (HAP) or 25 tons per year or more of any combination of HAPs. This facility is subject to the Major Source provisions of:

- 40 CFR 63 Subparts A National Emission Standards for Hazardous Air Pollutants General Provisions.
- 40 CFR, Subpart LLL National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry.

SECTION I. GENERAL INFORMATION

Title I, Part C (PSD): The facility is located in an area designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The facility is considered a "portland cement plant", which is one of the 28 Prevention of Significant Deterioration (PSD) source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source of air pollution with respect to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.

Title IV, CAA: The facility does not operate any units subject to the Acid Rain provisions of the Clean Air Act.

Title V, CAA: The facility is a Title V or "Major Source" of air pollution because the potential emissions of at least one regulated pollutant exceed 100 tons per year or because it is a major source of HAPS. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

State Rules: The cement plant is subject to state Rule 62-296.407, F.A.C. (Portland Cement Plants).

PERMITTING AUTHORITY

All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.

COMPLIANCE AUTHORITY

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department of Environmental Protection Southwest District, 13051 N. Telecom Parkway, Temple Terrace, Florida 33637-3767.

RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, this information is specifically related to the permitting action and is on file with the Department.

- Application for installation of SNCR systems received October 14, 2005.
- Application for installation of indirect firing systems and kiln burner replacement received August 22, 2006.
- Application revision received September 5, 2006.
- Additional details received September 15, 2006.
- Department's Technical Evaluation and Preliminary Determination issued November 3, 2006.
- Department's Final Determination issued concurrently with this Final Permit.

SECTION II. ADMINISTRATIVE REQUIREMENTS

- 1. <u>General Conditions</u>: The permittee shall operate under the attached General Conditions listed in Appendix GC of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 2. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 51, 52, 60, and 63 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- 3. <u>Construction and Expiration</u>: Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [Rules 62-4.070(4), 62-4.080, and 62-210.300(1), F.A.C.]
- 4. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

5. Source Obligation:

- a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
- b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

- 6. <u>Modifications</u>: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Chapters 62-210 and 62-212, F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes construction or modification of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

This section of the permit addresses the following existing emissions unit.

Emissions Unit 003 and 014 (Kilns 1 and 2)

Description: Dry preheater process kiln and clinker cooler systems employing the Polysius GEPOL preheater design.

Fuels: Each kiln is limited to a fuel heat input of 300 million British thermal units (MMBtu) per hour. Allowable fuels include: coal, Nos. 2, 4, 5, and 6 fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. Kiln No. 1 is also permitted to fire whole tire derived fuel.

Capacity: Each kiln is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour, and a maximum annual limit of 1,300,000 TPY.

Controls: A baghouse is used on each kiln for the control of PM emissions. Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of NO_X, SO₂, CO, and VOC. SNCR has been installed for NO_X control.

Monitors: Emissions of CO and NO_X are continuously monitored on both kilns.

Stack Parameters:

The stack for Kiln No. 1 has the following characteristics: stack height is 150 feet, exit diameter is 13 feet, exit temperature is 285 °F, and actual volumetric flow rate is approximately 315,000 acfm.

The stack for Kiln No. 2 has the following characteristics: stack height is 105 feet, exit diameter is 14 feet, exit temperature is 250 °F, and actual volumetric flow rate is approximately 315,000 acfm.

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit, unless otherwise noted, are in addition to those of any other air construction or operation permits. [Rule 62-4.030, 62-4.210, and 62-210.300(1)(b), F.A.C.]

EQUIPMENT AND CONTROL TECHNOLOGY

2. NO_x Controls:

- a) Low-NO_x Burners: This permit authorizes the previous installation of multi-channel, low-NO_x burners on kilns 1 and 2 including the associated fuel injection systems. The low-NO_X burners will create distinct combustion zones within the flame. An indirect firing system will be used to reduce the amount of primary air injected with the fuel used in the main kiln burner. This permit also authorizes the replacement of, or modification to, the currently installed burners if necessary for optimization of the indirect firing system. [Application; Rule 62-4.070(3), F.A.C.]
- b) Selective Non-Catalytic Reduction (SNCR): This permit authorizes the installation of an SNCR system designed, constructed and capable of lowering NO_x emissions in the kiln exhaust to meet the NO_x emission limits of this permit on each kiln. The SNCR systems consists of an aqueous ammonia tank, pumps, piping, compressed air delivery, injectors, control systems, and other ancillary equipment. Aqueous ammonia solution will be injected at a location(s) in the preheater with an appropriate temperature profile to support the SNCR process. The systems shall be operated and maintained to continuously meet the required NO_x emissions limits.

[Applicant Request; Rules 62-4.070, and 62-210.650, F.A.C.]

PERFORMANCE REQUIREMENTS

3. Process Rate Limitations: The maximum process dry preheater feed rate for each kiln shall not exceed 165 tons per hour (one-hour maximum) and 150 tons per hour (rolling 30-operating day average). In addition to the short-term preheater feed rate limits, the dry preheater feed rate for each kiln shall not exceed 1,300,000

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

tons during any consecutive 12-month period. [Application; Rule 62-4.070(3), F.A.C.; construction permits AC27-186923, AC27-240349, AC-258571, and 0530010-003-AC]

4. <u>Ammonia Injection</u>: Ammonia shall be injected at a rate sufficient to continuously meet the NO_X emission limits of this permit. The concentration of stored ammonia solutions shall be less than 20 percent (%) by weight. [Applicant Request; Rule 62-4.070, F.A.C.]

{Note: The stored ammonia concentration limitation avoids the requirement to prepare a Risk Management Plan pursuant to Section 112r of the Clean Air Act for this activity.}

EMISSIONS AND TESTING REQUIREMENTS

5. <u>Emissions Standards:</u> Upon complete installation of the indirect firing system, but no later than June 30, 2007 emissions from each kiln shall not exceed the following emissions standards for NO_X. These limits replace any previous NO_X emission limits for Kilns 1 and 2.

Pollutant	Emission Limit	Averaging Time	Compliance Method	Basis
NO	1.21 lb/ton of dry preheater feed	30-day rolling	CEMS	Applicant Request/
NO _x	181.5 lb/hr (as NO ₂)		CEIVIS	PSD Avoidance

 NO_X emissions from each kiln shall not exceed 1.21 lb/ton of dry preheater feed and 181.5 lb/hour on a rolling 30-operating day average as measured by the required CEMS. Mass emission rates for NO_X shall be calculated as NO_2 .

{Note: In combination with the annual dry preheater feed rate limitation of 1,300,000 tons per year per kiln, the above emissions standard effectively limits annual potential NO_X emissions from each unit to 786.5 tons/year. The NO_X limit is equivalent to approximately 2.0 lb/ton of clinker.}

[Applicant Request; Rules 62-4.070(3), 62-212.400(12), F.A.C.]

- 6. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 7. Supplemental Dioxin/Furan and PM/PM10 Tests: The owner or operator shall notify the Compliance Authority prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for dioxin/furan or PM/PM10. For purposes of this condition, a significant change includes but is not limited to the following: a physical or chemical change in the kiln feed material or fuel from that which was used in the most recent compliant performance test; the use of a raw material not previously used; a change in the percentage of a raw material employed in the mix design; a change in the Loss on Ignition ("LOI") of the fly ash; a change in the use of non-beneficiated fly ash or beneficiated fly ash; an increase in the levels of total chlorine/chloride or total hydrocarbons in kiln feed materials or fuels above those levels where compliance has been demonstrated through performance testing; changes in the exhaust gas cooling system including the addition, deletion or movement of dampers; and changes to the combustion system or its operation. Use of a particular feed mix, fuel, or cooling system configuration for which compliance with the D/F and PM emission limits has previously been demonstrated, shall not be considered a significant change. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.1349]

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

EXCESS EMISSIONS

{Note: The following conditions apply only to the SIP-based emissions standards specified in condition 5 of this section. Rule 62-210-700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS or the NESHAP programs.}

8. Definitions:

- a. Startup is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.
- b. Shutdown means the cessation of the operation of an emissions unit for any purpose.
- c. *Malfunction* means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200 (186, 263, and 279), F.A.C.]

- 9. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rules 62-210.650, and 62-210.700(4),F.A.C.]
- 10. Allowable Data Exclusions: Each 30-day rolling average shall include all periods of operation (including startup, shutdown, and malfunction), but may exclude limited periods due to malfunctions of the SNCR system. "Malfunctions of the SNCR system" are defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia-based solutions into the kiln system. No more than 30 hours in any calendar month shall be excluded from the compliance determinations due to malfunctions of the SNCR system. This data may be excluded from the compliance demonstrations only in accordance with the above requirements, provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. As provided by the authority in Rule 62-210.700(5), F.A.C., this condition replaces the provisions in Rule 62-210.700(1), F.A.C.

The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rules 62-210.200, and 62-210.700, F.A.C.]

CONTINUOUS MONITORING REQUIREMENTS

- 11. <u>CEMS Systems</u>: The NO_X CEMS shall be operated and maintained to measure and record the emissions of NO_X in each kiln system exhaust stack in a manner sufficient to demonstrate continuous compliance with the emission limits specified in this permit. The CEMS shall express the results in 1-hr averages in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd (parts per million dry volume).
 - a. NO_X Monitors: The NO_X monitors' span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

- b. Continuous Flow Monitor: A continuous flow monitor shall be installed in each stack to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitors and NOX monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6 as monitoring systems.
- c. Moisture Correction: The owner or operator is responsible for establishing an appropriate means for determining the moisture content of the flue gas in order to express monitoring results in units of the standards.

[Rules 62-4.070(3), and 62-297.520, F.A.C.]

- 12. <u>CEMS Data Requirements</u>: The NO_X CEMS shall be installed, calibrated, maintained, and operated in a manner sufficient to express results in units of pounds per ton of preheater feed, pounds per ton of clinker produced, and pounds per hour.
 - a. Valid Hourly Averages: Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour. Each 1-hour block average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel (or produced clinker) during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid.
 - Hours during which there is no kiln feed and no fuel fired are not valid hours.
 - Hours during which the plant is firing fuel but producing no clinker are valid, but these hours are
 excluded from the production-normalized emission rate computation (pounds per ton of clinker).
 These hours are included in any pollutant mass emission rate computation (pounds per hour).
 - b. 30-day Rolling Averages: Compliance with the emission limits for NO_X shall be based on a 30-day rolling average. Each 30-day rolling average shall be the arithmetic average of all valid hourly averages collected during the last 30 operating days. A new 30-day rolling average shall be recomputed after every day of operation for the new day and the preceding 29 operating days. For purposes of computing these emission limits, an operating day is any day that the kiln produces clinker or fires fuel.
 - c. Data Exclusion: Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Limited amounts of CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Condition 10 of this section. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
 - d. Availability: Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

[Rules 62-4.070(3), F.A.C.]

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

13. <u>Ammonia Injection</u>: A monitoring system to continuously monitor and record the ammonia injection rate of the SNCR system (1-hour block averages) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations. The injection rate of ammonia solution measured in terms of volumetric flow rate shall be converted to pounds per hour as 100% ammonia. [Rules 62-4.070(3), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

- 14. Operational Records: To demonstrate compliance with the limitations specified in this permit, the owner or operator shall maintain the following records on site. All records shall be made available to the Department and Compliance Authority upon request.
 - a. For each 1-hour block of operation, continuously monitor and record the dry preheater feed rate. Records shall also document the dry preheater feed rate for each consecutive 12-month period.
 - b. Estimates of NH₃/NO_X molar ratio and ammonia injection rate as 100% ammonia.

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

- 15. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. At a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the information specified in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.]
- 16. Malfunction Notifications: If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rules 62-210.700(6) and 62-4.130, F.A.C.]
- 17. <u>SIP Quarterly Report</u>: Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing: equipment malfunctions resulting in excluded CEMS data and/or excess emissions; and the monitor availability of each CEMS. The report shall contain the information and follow the general format specified in 40 CFR 60.7(c). [Rules 62-4.070(3), 62-4.130, 62-210.700(6), F.A.C., and 40 CFR 60.7]
- 18. Monitoring for PSD Applicability: The permittee shall monitor the emissions of CO, PM/PM₁₀, SO₂, and VOC from each kiln using the most reliable information available. The permittee shall calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after installation of the indirect firing systems. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C. [Rule 62-212.300(1)(e), F.A.C.]

{Note: For reference, definitions of Baseline Actual Emissions, Projected Actual Emissions, Actual Emissions, and Net Emissions Increase are defined below as they appear in 62-210.200, F.A.C.}

Baseline Actual Emissions: The rate of emissions, in tons per year, of a PSD pollutant, as follows:

For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding the date a complete permit application is received by the Department, except that the 10-year period shall not include any period earlier than November 15, 1990.

- 1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups and shutdowns.
- 2. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
- The average rate shall be adjusted downward to exclude any emissions that would have exceeded an
 emission limitation with which the major stationary source must currently comply, had such major
 stationary source been required to comply with such limitations during the consecutive 24-month
 period.
- 4. For a PSD pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each PSD pollutant.
- 5. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subparagraphs 2 and 3 above.

Projected Actual Emissions: The maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a PSD pollutant in any one of the 5 years following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit's design capacity or its potential to emit that PSD pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source. One year is one 12-month period. In determining the projected actual emissions, the Department:

- (a) Shall consider all relevant information, including historical operational data, the company's own representations, the company's expected business activity and the company's highest projections of business activity, the company's filings with the State or Federal regulatory authorities, and compliance plans or orders, including consent orders; and
- (b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns; and
- (c) Shall exclude that portion of the unit's emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth; or
- (d) In lieu of using the method set out in paragraphs (a) through (c) above, may be directed by the owner or operator to use the emissions unit's potential to emit, in tons per year.

Actual Emissions: The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department shall allow the use of a different time period upon a determination that it is more

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

- representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.
- (b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that such unit-specific allowable emissions limits are federally enforceable.
- (c) For any emissions unit that has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.

Net Emissions Increase:

- (a) With respect to any PSD pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
 - 1. The increase in emissions from a particular physical change or change in the method of operation as calculated pursuant to paragraph 62-212.400(2)(a), F.A.C.; and
 - 2. Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are creditable. Baseline actual emissions for calculating increases and decreases under this subparagraph 62-210.200(200)(a)2., F.A.C., shall be determined as provided in subsection 62-210.200(35), F.A.C., except that subparagraphs 62-210.200(35)(a)3. and (b)4., F.A.C., shall not apply.
- (b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
 - 1. The date five years before construction on the particular change commences; and 2. The date that the increase from the particular change occurs.
- (c) An increase or decrease in actual emissions is creditable only if the Department has not relied on it in issuing a permit for the source Rule 62-212.400, F.A.C. or Rule 62-212.500, F.A.C., which permit is in effect when the increase in actual emissions from the particular change occurs.
- (d) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- (e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- (f) A decrease in actual emissions is creditable only to the extent that:
 - 1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 - 2. It is federally enforceable as a practical matter at and after the time that actual construction on the particular change begins; and
 - 3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- (g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

- (h) Paragraph 62-210.200(11)(a), F.A.C., shall not apply for determining creditable increases and decreases.
- 19. <u>PSD Applicability Report</u>: For a period of 5 years following resumption of regular operations after installation of the indirect firing systems, the permittee shall report to the Department each unit's annual emissions of CO, PM/PM₁₀, SO₂, and VOC during the preceding calendar year. The report shall be submitted within 60 days after the end of each calendar year and shall contain the following information:
 - a. The name, address and telephone number of the owner or operator of the major stationary source;
 - b. The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
 - c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - d. Any other information that the owner or operator wishes to include in the report.

[Rule 62-212.300(1)(e), F.A.C.]

B. Coal Grinding and Transferring

This section of the permit addresses the following emissions unit.

EU ID	Emissions Unit Description
032	Coal Grinding and Transferring

The following new emission points, controlled by fabric filter baghouses, will be added as part of the indirect firing systems:

Point ID	Emissions Point Description
PS-01	#1 Coal Mill Baghouse
PS-02	#2 Coal Mill Baghouse
PS-03	#1 FK Pump Baghouse
PS-04	#2 FK Pump Baghouse
PS-05	#1 Coal Mill Pulverized Fuel Bin
PS-06	#2 Coal Mill Pulverized Fuel Bin

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Requirements: This unit is subject to 40 CFR 60, Subpart A (Identification of General Provisions) and 40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants). The Department determines that the emissions performance requirements of this permit are as stringent as, or more stringent than the limits imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subpart.

EQUIPMENT AND CONTROLS

- 2. <u>Indirect Firing System</u>: The permittee is authorized to install indirect firing systems for Kilns 1 and 2: (EU 003 and 014) to reduce the amount of primary air injected with the fuel used in the main kiln burner. The indirect firing system for each kiln includes one pulverized coal bin, one FK pump, and associated fans, filters, and conveying equipment. This system will be incorporated into the existing coal conveying, storage, and handling equipment. [Application; and 62-4.070(3), F.A.C.]
- 3. <u>Baghouse Controls</u>: Each new emissions point identified above for the new indirect firing systems shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains per dry standard cubic feet (gr/dscf) and a PM₁₀ design specification of 0.007 gr/dscf. [Application; and Rule 62-4.070(3), F.A.C.]

PERFORMANCE REQUIREMENTS

4. <u>Hours of Operation</u>: The hours of operation for this emissions unit are not limited (8760 hours per year). [Rule 62-210.200(PTE), F.A.C.]

EMISSIONS AND TESTING REQUIREMENTS

5. <u>Particulate Matter Standards:</u> Particulate matter emissions from the coal mills (Point ID PS-01 and PS-02) shall not exceed 0.007 gr/dscf of exhaust as determined by EPA method 5. All PM emitted from the baghouse exhaust is assumed to be PM₁₀. These requirements do not waive or vary any applicable NESHAP monitoring or record keeping requirements. [Rule 62-4.070(3), F.A.C.]

B. Coal Grinding and Transferring

- 6. <u>Visible Emissions Standards:</u> Visible emissions from each baghouse shall not exceed 10% opacity as determined by EPA Method 9. [Rule 62-4.070(3), F.A.C.]
- 7. <u>Testing Requirements</u>: Emission points PS-01 and PS-02 shall be stack tested to demonstrate initial compliance with the applicable emission standards for PM/PM₁₀ and visible emissions. All other emission points shall be tested for visible emissions only. The initial tests shall be conducted within 60 days following startup of the indirect firing system. Thereafter, compliance with the visible emission limits shall be demonstrated during each federal fiscal year (October 1st to September 30th) for all emission points listed above (PS-01 through PS-06). [Rule 62-297.310(7)(a), F.A.C.]
- 8. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 9. <u>Test Methods</u>: Any required tests shall be performed in accordance with the following reference methods and the applicable requirements of Appendix C of this permit, and the applicable NSPS provisions.

Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination Particulate Matter from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

REPORTING AND RECORD KEEPING

- 10. <u>Baghouse O&M Plan</u>: For each baghouse the permittee shall prepare an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Compliance Authority prior to the initial compliance tests for this unit. [Rule 62-4.070(3)]
- 11. <u>Test Reports</u>: For each test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. [Rules 62-297.310(8), F.A.C.]
- 12. <u>Notification</u>: The permittee shall notify the compliance authority within 5 days of startup of the indirect firing system. The notification shall include a tentative schedule for any required initial compliance testing for this unit. [Rule 62-297.310, F.A.C.]

FINAL DETERMINATION

CEMEX Cement, Inc.

Brooksville Cement Plant

DEP File No. 0530010-026-AC

On November 3, 2006 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" authorizing the installation of indirect firing systems (including after the fact authorization for burner replacements on Kilns 1 and 2), and installation of selective non-catalytic reduction (SNCR) systems (after the fact) on Kilns 1 and 2 at the existing Brooksville Cement Plant northwest of Brooksville in Hernando County.

The package included the Department's Draft Air Construction Permit, the "Intent to Issue Air Construction Permit," the "Technical Evaluation and Preliminary Determination," and the "Public Notice of Intent to Issue Air Construction Permit." The Department sent copies of the package to various individuals and agencies. CEMEX Cement, Inc. (CEMEX) published the Public Notice in *Hernando Today* on November 15, 2006 and provided to the Department the required proof of publication.

The Department received no comments from agencies or the public regarding the Draft Air Construction Permit. Comments were received from Koogler & Associates on behalf of CEMEX on November 20, 2006. Each comment is summarized below followed by the Department's response.

Any additions to permit conditions are double underlined and deletions are indicated by double strike-through.

Comment

The applicant requested that the NO_X emissions limit of 1.21 pounds per ton of dry preheater feed be adjusted to 1.30 pounds per ton of dry preheater feed, consistent with future actual emissions (past actual plus a ten percent demand increase).

Response

The SNCR and semi-direct projects were submitted (and actually completed) prior to the effective date of the New Source Review Reform rules. CEMEX originally requested an after-the-fact air construction permit to install Selective Non-Catalytic Reduction (SNCR) systems on Kilns 1 and 2 to reduce NO_X emissions in conjunction with the change to a semi-direct firing system. In order to avoid PSD review under this project, the applicant requested a lower NO_X emissions limit of 1.21 lb/ton of preheater feed, and a maximum preheater feed rate of 1,300,000 TPY on both kilns so that emissions increases would fall below the significant emissions rate that would trigger PSD. The State Rules in effect at the time the original application was received and when the project was actually completed relied on past actual to future potential emissions is appropriate for determining PSD applicability for this pollutant.

No changes will be made to the draft permit.

Comment

CEMEX requested that the averaging time for the ammonia injection rate of 133 pounds per hour as 100 percent ammonia be changed to a 30-day rolling average which is consistent with the averaging time for the NO_X emission limit. An alternative suggestion was to set a maximum NH₃:NO_X molar ratio of 1.0.

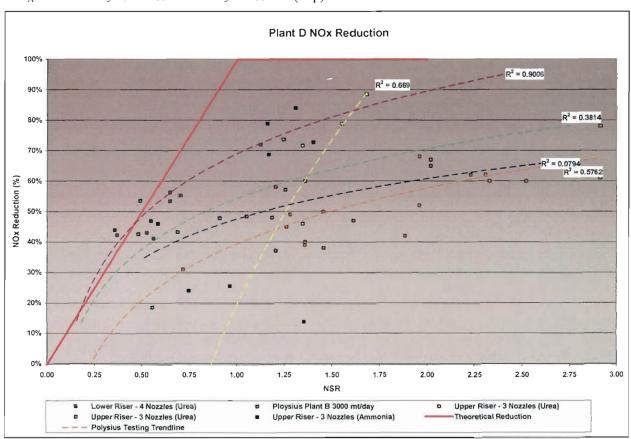
Response

The Department originally calculated the ammonia (NH_3) usage rate based on the <u>theoretical</u> amount of reagent needed to reduce NO_X emissions from a presumed "pre-control" value of approximately 4 pounds per ton of clinker (lb/ton) to zero. With a NO_X limit of approximately 2 lb/ton, the reasoning was that typical molar ratios will be on the order of 0.60 to effect a reduction of approximately 50%.

CEMEX has made, or plans to make, certain changes on the kilns including: changing out the main kiln burners and possibly changing them out again; switching from direct to semi-direct and then to indirect firing; installing or upgrading tire introduction systems to burn fuel near the kiln inlets; and future use of petroleum coke in the main kiln burner at high temperature and in a highly oxidizing environment.

The SNCR system will allow CEMEX to comply with the NO_X limits but the "pre-control" (i.e. level without reagent injection) might at times increase to values significantly greater than 4 lb/ton at least for short duration. This can make it difficult to maintain the proposed NH₃ injection rate at less than 133 lb/hr while achieving substantial NO_X reduction. For example, starting at 7 lb NO_X/ton the NH₃ injection rate would theoretically reduce emissions only to 3 lb/ton. Therefore, the 133 lb/hr NH₃ use limitation would in effect allow a molar ratio of only 4/7 or 0.57.

The following diagram shows NO_X abatement rates for various molar ratios at a particular preheater kiln in North America for various injector locations and configurations as well as reagent types (NH₃ versus urea). In many cases, only modest reductions are obtained even when molar ratios are high. The upper "straight line" plot represents the idealized behavior when one mole of NH₃ actually abates one mole of NO_X with no NH₃ combustion or NH₃ emissions (slip).



The "upper curve" (under the idealized plot) represents an experimentally determined optimal configuration peculiar to that kiln and its raw material, fuel and other operating features. For reference, a molar ratio of 0.57 would reduce NO_X emissions anywhere between 25 and 50% depending on optimization of the SNCR unit for the case of the kiln described above.

Because of recent and continuing changes at the facility, and establishment of the lowest NO_X limit for an operating kiln, the Department will allow additional time to optimize the SNCR system. Additionally, there is an economic incentive for CEMEX to minimize ammonia slip.

Final Determination CEMEX Cement, Inc.

The Department believes that CEMEX can progressively optimize the SNCR systems to eventually achieve in the direction of the upper curve and towards the left hand side to achieve the best possible NO_X reduction efficiency with the lowest ammonia usage feasible for Brooksville Kilns 1 and 2. However this will require experimentation over the coming months as the various projects are completed (kiln burner, tire use, etc).

Although NH₃ is not a PSD pollutant per se, it is a fine particulate precursor and measures are needed to insure that its emissions are minimized especially given the proximity to the Class I Chassahowitzka National Wildlife Refuge.

The Department will require submittal of a report outlining the measures taken, and yet to be taken, to optimize reagent efficiency and minimize NH₃ oxidation (to NO_X) and NH₃ slip (emissions). The information will be used by the Department to establish reagent use conditions when processing the Kilns 1 and 2 permanent tire use applications. Appropriate reagent injection requirements will be added to future permits, pending results from the required study.

The Department will make the following changes to Section III, Subsection A, Specific Condition 4:

4. Ammonia Injection Rate: The ammonia injection rate shall not exceed 133 pounds per hour (1-hour block as 100% ammonia) in order to minimize ammonia emissions (slip). Ammonia shall be injected at a rate sufficient to continuously meet the NO_X emission limits of this permit. The concentration of stored ammonia solutions shall be less than 20 percent (%) by weight.

[Applicant Request; Rule 62-4.070, F.A.C.]

{Note: The maximum_ammonia injection rate is approximately equivalent to an NH₂/NO₂ molar ratio of 1.0 presuming baseline uncontrolled NO₂ emissions of 4 lb/ton of clinker. The stored ammonia concentration limitation avoids the requirement to prepare a Risk Management Plan pursuant to Section 112r of the Clean Air Act for this activity.}

The following reporting requirement will also be added to Section III, Subsection A of the permit:

- 20. Reagent Optimization Study: The permittee shall submit a report outlining the measures taken and yet to be taken to optimize reagent efficiency and minimize NH₃ oxidation (to NO_X) and NH₃ slip (emissions). The report shall be submitted to the Department no later than June 30, 2007 and shall contain at least the following information:
 - a. <u>Documentation of past and present operating data and stream characteristics from the pyroprocessing systems that will provide a baseline evaluation of the preheater systems in terms of performance and emissions, specifically concentrating on NO_X, NH₃, O₂ and CO.</u>
 - b. <u>Documentation of NH₃ injection at various locations in the system to measure the effect of NH₃ at different temperature ranges and locations throughout the systems and under varying operational modes (e.g. kiln burning and raw material variations).</u>
 - c. Continuous NO_X stack emissions data and other parameter data as needed in the downcomer or kiln risers to demonstrate the effects of NH₃ injection.
 - d. <u>Identification of the optimal conditions to achieve the permitted NO_X limitation while</u> minimizing NH₃ consumption and emissions (slip).

[Rule 62-4.070. F.A.C.]

Comment

CEMEX requested that the requirement for a diluent gas monitor be removed from the permit.

Response

The draft permit includes no emissions limits requiring a correction to a specific oxygen concentration. Because there is no limit requiring the use of this monitor, Specific Condition 11 in Section III, Subsection A of the permit will be changed as follows:

- 11. <u>CEMS Systems</u>: The NO_X CEMS shall be operated and maintained to measure and record the emissions of NO_X in each kiln system exhaust stack in a manner sufficient to demonstrate continuous compliance with the emission limits specified in this permit. The CEMS shall express the results in 1-hr averages in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd (parts per million dry volume).
- a. NO_X Monitors: The NO_X monitors' span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.
- b. Diluent Monitor: An exygen monitor shall be installed to measure exygen concentration in each stack.
- <u>b.</u> ← Continuous Flow Monitor: A continuous flow monitor shall be installed in each stack to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitors and NO_X monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6 as monitoring systems.
- <u>c.</u> Moisture Correction: The owner or operator is responsible for establishing an appropriate means for determining the moisture content of the flue gas in order to express monitoring results in units of the standards.

Comment

Specific Condition 14 requires monitoring and recording of dry preheater feed rate and clinker production. Clinker production is not directly measured but is calculated based on preheater feed rate measurements. The applicant requested clarification of the method used to determine clinker production rate.

Response

A permitting note will be added to clarify that clinker production is not directly measured, but based on preheater feed rate.

The following specific changes will be made to Section III, Subsection A, Specific Condition 14:

- 14. Operational Records: To demonstrate compliance with the limitations specified in this permit, the owner or operator shall maintain the following records on site. All records shall be made available to the Department and Compliance Authority upon request.
- a. For each 1-hour block of operation, continuously monitor and record the dry preheater feed rate and clinker production rate <u>for each kiln</u>. Records shall also document the dry preheater feed rate and clinker production rates for each consecutive 12 month period <u>for each kiln</u>.
- b. Estimates of NH₃/NO_x molar ratio and ammonia injection rate as 100% ammonia.

<u>{Permitting Note: Clinker production is not directly measured. It is a computed value based on measured preheater feed rate. and fuel and raw material properties.}</u>

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.]

Final Determination CEMEX Cement, Inc.

Comment

CEMEX questions why specific condition 18 states that subparagraph 62-210.200(35)(b)4, F.A.C., does not apply.

Response

Definitions of Baseline Actual Emissions, Projected Actual Emissions, Actual Emissions, and Net Emissions Increase are defined in Specific Condition 18 of the draft permit as they appear in 62-210.200, F.A.C for reference and clarification. The permit language is taken directly from the definitions in 62-210.200. The definition of 'Baseline Actual Emissions' states that 62-210.200(35)(b)4 does not apply.

Comment

CEMEX requested that the initial PM/PM₁₀ testing required for the two coal mill baghouses included in the coal grinding and transferring emissions unit be changed to require initial testing within 60 days following startup of the indirect firing systems.

Response

The draft permit requires initial PM/PM₁₀ testing of these two baghouses within 60 days following installation of the indirect firing system. The Department will make the requested change. Additionally, a condition will be added requiring notification of startup of the indirect firing system.

The following specific changes will be made to Section III, Subsection B, Specific Condition 7:

7. Testing Requirements: Emission points PS-01 and PS-02 shall be stack tested to demonstrate initial compliance with the applicable emission standards for PM/PM₁₀ and visible emissions. All other emission points shall be tested for visible emissions only. The initial tests shall be conducted within 60 days following startup installation of the indirect firing system. Thereafter, compliance with the visible emission limits shall be demonstrated during each federal fiscal year (October 1st to September 30th) for all emission points listed above (PS-01 through PS-06). [Rule 62-297.310(7)(a), F.A.C.]

The following Specific Condition will be added to the same subsection of the permit under Reporting and Record Keeping:

12. <u>Notification: The permittee shall notify the compliance authority 5 days prior to startup of the indirect firing system. The notification shall include a tentative schedule for any required initial compliance testing for this unit.</u>

The final decision by the Department is to issue the permit with the changes noted.

SECTION IV. APPENDIX GC

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

SECTION IV. APPENDIX GC

GENERAL CONDITIONS

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - a. Determination of Best Available Control Technology ();
 - b. Determination of Prevention of Significant Deterioration ();
 - c. Compliance with National Emssion Standards for Hazardous Air Pollutants (); and
 - d. Compliance with New Source Performance Standards ().
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION IV. APPENDIX SC

STANDARD CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at this facility.

EMISSIONS AND CONTROLS

- Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and62-210.200(203), F.A.C.]
- 8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

SECTION IV. APPENDIX SC

STANDARD CONDITIONS

- 11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
- 12. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

[Rule 62-297.310(4), F.A.C.]

14. Determination of Process Variables

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

- 15. <u>Sampling Facilities</u>: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
- 16. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 17. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1) The type, location, and designation of the emissions unit tested.

SECTION IV. APPENDIX SC

STANDARD CONDITIONS

- 2) The facility at which the emissions unit is located.
- 3) The owner or operator of the emissions unit.
- 4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8) The date, starting time and duration of each sampling run.
- 9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10) The number of points sampled and configuration and location of the sampling plane.
- 11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12) The type, manufacturer and configuration of the sampling equipment used.
- 13) Data related to the required calibration of the test equipment.
- 14) Data on the identification, processing and weights of all filters used.
- 15) Data on the types and amounts of any chemical solutions used.
- 16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18) All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

- 18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 19. <u>Annual Operating Report</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

From: Ha

Harvey, Mary

Sent:

Tuesday, December 26, 2006 1:09 PM

To:

Adams, Patty; Sheplak, Scott

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

From: Nasca, Mara

Sent: Tuesday, December 26, 2006 1:02 PM

To: Harvey, Mary

Cc: Zhang-Torres; Prickett, Patricia; Zell, David

Subject: RE: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Thanks Mary

From: Harvey, Mary

Sent: Friday, December 22, 2006 1:10 PM

To: 'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'jkoogler@kooglerassociates.com'

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Dear Sir/Madam:

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Thank you,

DEP, Bureau of Air Regulation

From:

Harvey, Mary

Sent:

Tuesday, December 26, 2006 8:24 AM

To:

Adams, Patty

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

----Original Message----

From: Amarjit S Gill [mailto:amarjits.gill@cemexusa.com] Sent: Sunday, December 24, 2006 12:36 PM

To: Harvey, Mary

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Return Receipt

Your

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

document:

was

amarjits.gill@cemexusa.com

received

by:

at:

12/24/2006 11:36:17

From:

Harvey, Mary

Sent:

Tuesday, December 26, 2006 8:24 AM

To:

Adams, Patty

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

----Original Message----

From: michaelanthony.gonzales@cemexusa.com [mailto:michaelanthony.gonzales@cemexusa.com]

Sent: Monday, December 25, 2006 12:58 PM

To: Harvey, Mary

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Return Receipt

Your

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

document:

was

michaelanthony.gonzales@cemexusa.com

received

by:

at:

12/25/2006 12:57:46 PM EST

From:

Harvey, Mary

Sent:

Friday, December 22, 2006 3:09 PM

To:

Adams, Patty; Mulkey, Cindy

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

----Original Message----

From: Charles E Walz [mailto:charles.walz@cemexusa.com]

Sent: Friday, December 22, 2006 2:14 PM

To: Harvey, Mary

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Return Receipt

Your

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

document:

was

charles.walz@cemexusa.com

received

by:

at:

12/22/2006 13:14:03

From: Harvey, Mary

Sent: Friday, December 22, 2006 3:07 PM

To: Mulkey, Cindy; Adams, Patty

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

From: John Koogler [mailto:jkoogler@kooglerassociates.com]

Sent: Friday, December 22, 2006 2:35 PM

To: Harvey, Mary Cc: Mulkey, Cindy

Subject: RE: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Thanks Cindy and Mary. Have a good Christmas.

John

John B Koogler Koogler & Associates, Inc 4014 NW 13th St Gainesville, FI 32609 352/377-5822 jkoogler@kooglerassociates.com

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Friday, December 22, 2006 1:10 PM

To: michaelanthony.gonzales@cemexusa.com; charles.walz@cemexusa.com; amarjits.gill@cemexusa.com; Nasca, Mara; fbergen@kooglerassociates.com; sfernandez@ohfc.com; Little.James@epamail.epa.gov; jkoogler@kooglerassociates.com

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

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Thank you,

DEP, Bureau of Air Regulation

From:

Harvey, Mary

Sent:

Friday, December 22, 2006 1:54 PM

To:

Mulkey, Cindy; Adams, Patty

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

From: Nasca, Mara

Sent: Friday, December 22, 2006 1:48 PM

To: Harvey, Mary

Subject: Read: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Your message

To:

'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'jkoogler@kooglerassociates.com'

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

Sent:

12/22/2006 1:10 PM

was read on 12/22/2006 1:48 PM.

From:

Harvey, Mary

Sent:

Friday, December 22, 2006 1:11 PM

To:

Mulkey, Cindy; Adams, Patty; Gibson, Victoria

Subject:

FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, inc.

Attachments: 0530010.026.AC.F_pdf.zip

From: Harvey, Mary

Sent: Friday, December 22, 2006 1:10 PM

To: 'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'jkoogler@kooglerassociates.com'

Subject: FW: FINAL PERMIT #0530010-026-AC - CEMEX Cement, Inc.

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Thank you,

DEP, Bureau of Air Regulation