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. 0530010-022-AC
Brooksville Cement Plant Kiln No. 2
Hernando County

/

Enclosed is the Final Permit Number 0530010-022-AC authorizing the use of tire derived fuel in Kiln No. 2 for a temporary trial period, and construction of a tire feeding system on Kiln No. 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 (thirty) 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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (*) and copies were sent by U.S. Mail or electronic mail before the close of business on 8/15/06 to the person(s) listed:

Michael A. Gonzales, CEMEX*
Charles Walz, CEMEX
Jeet Gill, CEMEX
Mara Nasca, DEP SWD
John Koogler, P.E., Koogler & Associates
Segundo J. Fernandez, OHF&C

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.

Mary J. O'Hara 8/15/06
(Clerk) (Date)

FINAL DETERMINATION

CEMEX Cement, Inc.

Brooksville Cement Plant

DEP File No. 0530010-022-AC

On July 14, 2006 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" authorizing the use of tire derived fuel in Kiln No. 2 for a temporary trial period, and construction of a tire feeding system on Kiln No. 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 the *Hernando Today* on July 21, 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 received from Koogler and Associates, Inc. for CEMEX are listed below (*italics*) followed by the Department's response.

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

I. Cover Page, Expiration Date

Comment

The expiration date shown in the draft permit is May 1, 2007. CEMEX estimates that it will require approximately seven months to get funding for the project, order the equipment for the tire feed system and install the equipment on Kiln No. 2. Beyond that, there should be an allowance of approximately a month for equipment shake down; approximately two months for CEMS certification, baseline emission testing and the development of baseline emission data; approximately three months for the trial burn period (see following comment) and two months as a contingency. This places the time of completion for the test period around November 1, 2007. For purposes of permit expiration, we are requesting a permit expiration date of December 31, 2007.

Response

The Department will extend the permit expiration date from May 1, 2007 to September 30, 2007 (five months). The draft permit includes a requirement to certify the CEMS at least 30 days prior to the firing of TDF. To maintain assurance of timely CEMS certification, the certification requirement will also be changed such that CEMS certification will be completed by October 15, 2006.

The following specific changes will be made to Section III, Facility Wide Conditions, Specific Condition 1, CEMS Certification:

1. CEMS Certification: The NO_X and CO CEMS, and stack flow monitors shall be fully certified pursuant to Appendix B and functioning properly ~~at least 30 days prior to the firing of TDF~~ no later than October 15, 2006. A certification test schedule shall be submitted to the Department at least 30 days prior to certification. The Department shall be notified of any changes to the schedule at least 7 days prior to certification testing. Once certified, the CEMS (including flow monitor) shall be continuously operated to meet the quality assurance requirements of 40 CFR, Appendix F. If a CEMS fails to meet any of the requirements of certification, additional testing

may be required for that system. Once the CEMS have been certified, all CEMS data shall be available to the Department, upon request, in an electronic format.

[Rule 62-4.070(3), F.A.C., CFR Part 60, Appendix B, Performance Specification 2, and Appendix F]

II. Section IV.A, Condition No. 4 (page 8 of 11)

Comment

Condition No. 4 specifies that the tire derived fuel test period shall end no later than March 1, 2007. In view of the schedule outlined in the preceding comment, we are requesting that this condition be amended to state that the test period shall end no later than December 31, 2007.

Also in this condition, and in Condition No. 1 of this same section, the permit states that the trial burn period for Whole Tire Derived Fuel shall be 60 consecutive calendar days in duration. We are requesting that CEMEX be authorized to burn Whole Tire Derived Fuel in Kiln No. 2 for 90 operating days.

The 90 operating day trial burn period will give CEMEX the time to balance the kiln while firing Whole Tire Derived Fuel and to develop a representative record of emission data. Furthermore, by defining the trial burn period in terms of operating days, CEMEX will have the flexibility to work around unscheduled kiln outages.

Response

The applicant requests that the "test period" ending correspond to the expiration of the permit. However, the Department feels it is necessary to retain the submittal of the final test summary report (due within 60 days of conclusion of the test period) within the time constraints of this permit. The test period shall be extended to no later than July 31, 2007 (60 days prior to the revised permit expiration date).

The applicant requests expansion of the "test period" from 60 calendar days to 90 operating days in order to accommodate unforeseen plant upsets or unscheduled outages. Emissions in excess of permitted limits are neither expected nor allowed while burning whole tire derived fuel. This extension of the test period does not alter any of the assumptions made during the technical evaluation and preliminary determination.

The following specific changes will be made to Section IV, Emissions Unit Specific Conditions, A. Cement Kiln No. 2 (EU ID 014), Specific Condition 1, Tire Feed System:

1. Tire Feed System: The permittee is authorized to install and operate a tire feed system on Kiln No. 2 for temporary use of whole tire derived fuel. The tire feeder will be equipped with a double air lock system to prevent leakage in and out of the kiln during the tire feeding process and will be connected to the existing tire handling system. Upon completion of the ~~60~~ 90 day trial burn period established in this permit, the permittee shall cease use of the tire feed system and of tire burning until further authorized by the Department. [Application, 62-4.070(3), F.A.C.]

The following specific changes will be made to Section IV, Emissions Unit Specific Conditions, A. Cement Kiln No. 2 (EU ID 014), Specific Condition 4, Schedule and Expiration:

4. Schedule and Expiration: Beginning no earlier than 30 days from certification of the CEMS (pursuant to Section III, Facility Wide Conditions, Specific Condition 1), the permittee may begin testing tires as per this permit. Testing shall occur over a ~~60~~ 90 consecutive ~~calendar~~ operating day period ("testing period") and shall end no later than ~~March 1~~July 31, 2007. At least 30 calendar days of data shall be recorded by the "certified" CO and NO_X CEMS (including flow data) prior to any TDF being fired in Kiln No. 2. [Rule 62-4.070(3), F.A.C.]

The following specific changes will be made to Section IV, Emissions Unit Specific Conditions, A. Cement Kiln No. 2 (EU ID 014), Specific Condition 17, CEMS/Process Data Reporting:

17. CEMS/Process Data Reporting: All valid NO_X and CO CEMS data (including periods of startup, shutdown, and malfunction) recorded prior to the test period, beginning immediately following certification of the CEMS, and all data recorded during the ~~60~~90-day test period shall be included in the Final Report to the Department in a common electronic format and consistent with the procedures in Section III, Facility Wide Conditions, Specific Condition 1 of this permit. All emissions data should be reported in terms of parts per million (ppmvd), lb/ton of feed, lb/ton of clinker, and lb/hour. The electronic file shall also include hourly averages (or hourly estimates as appropriate) of the following process data during the ~~60~~90-day trial: clinker production, dry kiln feed, percent heat input of each fuel, heat input rates for each fuel (MMBtu/hr), average hourly stack flow (dscfm), and amounts of ammonia injected by the SNCR system. [Rule 62-4.070(3), F.A.C.]

III. Section III, Condition No. 2 (page 6 of 11)

Comment

This condition requires that the CO and NO_X CEMS data be reported as one-hour averages in the units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd corrected to 15 percent oxygen. CEMEX has no concerns regarding the reporting of emissions in the units of pounds per ton of kiln feed, pounds per ton of clinker, and pounds per hour. And, the company has no concern with reporting the concentrations of CO and NO_X (ppmvd) but sees no reason for correcting the concentration data to 15 percent oxygen. There are no permit conditions, regulatory standards or Department rules that require such a correction. CEMEX, therefore, requests that the requirement to correct the CO and NO_X concentration data to 15 percent oxygen be deleted from the permit.

Response

The Department agrees with the above comment. Section III. Facility Wide Conditions, Specific Condition 2. CEMS Data Requirements will be changed as follows:

2. CEMS Data Requirements: The CEMS shall be installed, calibrated, maintained, and operated in the kiln system main stack to measure and record the emissions of CO and NO_X in a manner consistent with the existing emission limits for the kiln systems. 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 ~~@ 15% O_2~~ (parts per million dry volume ~~corrected to 15 % oxygen~~).

IV. Section IV.A., Condition No. 9 (page 9 of 11)

Comment

This condition established requirements for the baseline emission tests and includes the note that these emission tests can be used to satisfy the annual compliance testing requirement of the facility Title V Air Operating Permit. The baseline emission testing is for CO, NO_X, VOC, PM/PM10, visible emissions and D/F (the latter with the raw mill operating and with the raw mill off).

CEMEX has the annual compliance testing for Kiln No. 2 (and Kiln No. 1) scheduled for the week of September 11, 2006. This compliance testing will include all the emission testing required by Condition No. 9, except for the D/F testing. CEMEX would like the option of using the scheduled September 2006 compliance test data as the baseline data for Kiln No. 2. Regarding the baseline D/F testing, CEMEX is planning D/F testing on Kiln No. 2 with the raw mill not operating later in 2006 and conducted D/F testing on Kiln No. 2 to reset the 30-month clock for tests with the raw mill

operating in January 2006. CEMEX would like the option of using these two D/F emission tests as baseline tests for the purposes of this permit condition.

Response

Testing to demonstrate the effects of burning tires should be conducted as soon as practicable following baseline testing to minimize variations in fuels, raw materials, and other operating parameters. Because it is anticipated that the funding for the project will take several months (see Comment I), the Department will not allow the scheduled compliance tests, and previously conducted D/F testing to satisfy baseline testing requirements. These tests will have been conducted several months before the testing period. Baseline testing should be conducted just prior (preferably within a few days or weeks) to firing tires in Kiln No. 2 and a full description of the test schedule should be included in the testing program protocol. The Department's Southwest District is the compliance authority on D/F testing and the MACT 30-month clock. Nothing in this permit addresses MACT testing nor the setting or resetting of the 30-month clock.

For clarification, Section III. Facility Wide Conditions, Specific Condition 9. Baseline Emissions Test will be changed as follows:

9. Baseline Emissions Test: Initial testing for Kiln No. 2 when firing only coal shall be performed to determine NO_X, CO, VOC, dioxin/furans (both raw mill on and raw mill off conditions), PM/PM_{10}, and visible emissions to establish baseline levels. Baseline tests shall be performed at permitted capacity, and prior to firing any TDF. Emissions above any permitted standard experienced during baseline testing shall be reported to the Department. The test period shall not commence until baseline testing demonstrates that the unit is in compliance and operating within the permitted limits. Additionally, the test period shall begin as soon as practicable following baseline testing, and in no case shall begin more than 45 days following baseline testing for any pollutant. [Rule 62-4.070(3), F.A.C.]

V. Section IV.A. Condition No. 11, (page 10 of 11)

Comment

This condition requires that VOC emissions data be expressed in several units including concentration (ppmvd) corrected to seven percent oxygen. There is no permit condition, regulatory requirement or Department rule that requires correcting VOC concentration data to seven percent oxygen. CEMEX requests that the requirement to correct VOC concentration data to seven percent oxygen be deleted from the permit.

Response

The Department agrees with the above comment. Section IV. Emissions Unit Specific Conditions, A. Cement Kiln No. 2(EU ID 014), Specific Condition 11. Data Requirements will be changed as follows:

11. Data Requirements: All test data shall be reported in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hr, lb/ton of clinker, lb/ton of dry feed) and ppmvd as propane ~~corrected to 7% oxygen~~. [Rule 62-4.070(3), F.A.C.]

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

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. 0530010-022-AC
Brooksville Cement Plant
Expiration date: September 30, 2007

PROJECT AND LOCATION

This permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel in Kiln No. 2 at CEMEX Cement's Brooksville Portland cement plant. 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, P.E., Acting Director
Division of Air Resource Management

FACILITY DESCRIPTION

The existing facility consists of two dry process kilns with a preheater design, 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 788,400 ton per year of clinker. The plant is located on Highway 98, northwest of Brooksville in Hernando County, Florida.

PROJECT DESCRIPTION

This project allows the applicant to construct a tire feed system for Kiln No. 2 and to burn whole tire-derived fuel (TDF) in Kiln No. 2, for a designated trial period, in order to characterize and evaluate emissions from Kiln No. 2 while burning a combination of TDF and coal. Continuous emissions monitoring of CO and NO_x from certified continuous emissions monitoring systems (CEMS) are required during the trial period, as well as stack testing for dioxin/furan, VOC, PM/PM_{10}, and visible emissions.

EMISSIONS UNITS

This permit addresses the following emission units:

EU ID	Emissions Unit Description
003	Cement Kiln No. 1
014	Cement Kiln No. 2

REGULATORY CLASSIFICATION

Title III: The facility is a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V or "Major Source of Air Pollution" in accordance with Chapter 62-213, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: The plant is located in an area that is designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. It is classified as a "portland cement plant", which is one of the facility categories listed at 62-210.200 (Major Stationary Source) 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 major source of air pollution with respect to Rule 62-212.400 F.A.C., Prevention of Significant Deterioration of Air Quality.

NSPS: Portions of the cement plant are subject to the following New Source Performance Standards (NSPS) in 40 CFR 60: Subpart A (General Provisions); Subpart Y (Coal Preparation Plants); and Subpart OOO (Non Metallic Mineral Processing). Any affected source subject to the provisions of 40 CFR 63, Subpart LLL (Portland Cement Manufacturing Industry) is exempt from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart F (Portland Cement Plants).

NESHAP: Portions of the cement plant are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63: Subpart A (General Provisions); and Subpart LLL (Portland Cement Manufacturing Industry).

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 allowance of whole tire derived fuel (TDF) and petroleum coke as fuels in Kilns No. 1 and No. 2, various throughput adjustments and other changes received October 14, 2005.
- Application for petroleum coke and TDF fuel trial burn, received December 12, 2005.
- Department's Request for Additional Information dated January 10, 2006.
- Applicant's response to RAI dated April 14, 2006.
- Koogler letter requesting withdrawal of petroleum coke from trial burn, received June 27, 2006.
- Department's Final Determination issued concurrently with this Final Permit.

1. General Conditions: 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 terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. 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. Construction and Expiration: 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. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), 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. Modifications: 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. Title V Permit: The scope of the temporary project included in this permit (Kiln No. 2 TDF trial burn) is to develop information in support of another project requesting permanent use of TDF in Kiln No. 2. Any future authorization to fire whole tire derived fuel would require a revision to the Title V air operation permit. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

The following conditions apply facility wide. (i.e., Kiln No. 1 and Kiln No. 2)

CEMS REQUIREMENTS

1. CEMS Certification: The NO_X and CO CEMS, and stack flow monitors shall be fully certified pursuant to Appendix B and functioning properly no later than October 15, 2006. A certification test schedule shall be submitted to the Department at least 30 days prior to certification. The Department shall be notified of any changes to the schedule at least 7 days prior to certification testing. Once certified, the CEMS (including flow monitor) shall be continuously operated to meet the quality assurance requirements of 40 CFR, Appendix F. If a CEMS fails to meet any of the requirements of certification, additional testing may be required for that system. Once the CEMS have been certified, all CEMS data shall be available to the Department, upon request, in an electronic format.

   [Rule 62-4.070(3), F.A.C., CFR Part 60, Appendix B, Performance Specification 2, and Appendix F]

2. CEMS Data Requirements: The CEMS shall be installed, calibrated, maintained, and operated in the kiln system main stack to measure and record the emissions of CO and NO_X in a manner consistent with the existing emission limits for the kiln systems. 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. *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).
      - Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, and malfunction.

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

3. Moisture Correction: When needed to determine concentration on a dry basis, the owner or operator shall install a system to determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). [Rules 62-4.070(3), F.A.C]

4. Ammonia Injection: Hours in which ammonia injection occurred by the SNCR system shall be noted and the amount of ammonia shall be recorded with the CEMS data in the data acquisition handling system DAHS. [Rules 62-4.070(3), F.A.C]

REPORTING REQUIREMENTS

5. CEMS Certification Reports: Within 30 days following certification of the CEMS, the permittee shall submit to the Department's Bureau of Ambient Monitoring and Mobile Sources, Emissions Monitoring Section, copies of the certification test reports which shall, at a minimum, meet the reporting requirements of 9.0 in Appendix B, Performance Specification 2.

   [Rule 62-4.070(3), F.A.C., CFR Part 60, Appendix B, Performance Specification 2]

AUTHORIZATION

6. Burners and SNCR: An application for permanent use of the kiln burners and SNCR currently in operation on Kiln No. 1 and Kiln No. 2 is pending with the Department.

A. Cement Kiln No. 2 (EU ID 014)

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

Emissions Unit 014 (Kiln No. 2)
Description: Dry preheater process kiln and clinker cooler system employing the Polysius GEPOL preheater design. Pillard Rotoflam ® burners in a semi-direct configuration were recently installed on Kiln No. 2 and an after-the-fact application for permanent authorization is pending. *Fuels*: Kiln No. 2 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. *Capacity*: Kiln No. 2 is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour. *Controls*: A baghouse is used on Kiln No. 2 for the control of PM emissions. There are no other permitted add-on controls for any of the other pollutants emitted from the kiln. Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of NO_X, SO_2, CO, and VOC. SNCR has been installed for NO_X control (after-the-fact application for permanent authorization is pending). *Monitors*: Emissions of CO and NO_X are continuously monitored on Kiln No. 2, however the CEMS are not certified. Additional CO and NO_X CEMS requirements are included in this permit. *Stack Parameters*: 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.

EQUIPMENT DESCRIPTION

1. Tire Feed System: The permittee is authorized to install and operate a tire feed system on Kiln No. 2 for temporary use of whole tire derived fuel. The tire feeder will be equipped with a double air lock system to prevent leakage in and out of the kiln during the tire feeding process and will be connected to the existing tire handling system. Upon completion of the 90-day trial burn period established in this permit, the permittee shall cease use of the tire feed system and of tire burning until further authorized by the Department. [Application, 62-4.070(3), F.A.C.]

AUTHORIZATION

2. Relation to Other Permits: The conditions of this permit 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.]
3. Trial Use of TDF Firing: Subject to the conditions of this permit, the permittee is temporarily authorized to conduct a testing program to determine site specific emission characteristics and technical feasibility of firing up to 20 percent TDF in kiln system No. 2. Kiln system No. 2 (Units 014, and 015) shall remain subject to the conditions of all existing permits related to air pollution and control equipment during the field-testing program. [Rule 62-4.070(3), F.A.C.]
4. Schedule and Expiration: Beginning no earlier than 30 days from certification of the CEMS (pursuant to Section III, Facility Wide Conditions, Specific Condition 1), the permittee may begin testing tires as per this permit. Testing shall occur over a 90 consecutive operating day period ("testing period") and shall end no later than July 31, 2007. At least 30 calendar days of data shall be recorded by the "certified" CO and NO_X CEMS (including flow data) prior to any TDF being fired in Kiln No. 2. [Rule 62-4.070(3), F.A.C.]
5. Trial Period Summary and Testing Protocol: The permittee shall submit to the Permitting and Compliance Authorities a summary outlining the testing objectives and a detailed testing protocol for the testing period

at least 45 days prior to the beginning of the testing period. Approval of the testing protocol must be obtained from the Permitting Authority prior to firing any TDF in Kiln No. 2. The permittee shall submit updates to the testing protocol and testing schedule as necessary, but no later than 7 days prior to any scheduled test. At a minimum the trial period summary and testing protocol shall include the following information:

a. testing summary including outline, objectives, etc.,
b. testing schedule,
c. test methods to be used,
d. sampling locations,
e. quantity and duration of test runs for each test,
f. expected process rates during testing,
g. contact information for facility and test team,
h. audit samples to be used,
i. description of internal QA/QC procedures used by test team, and
j. any deviation from any of the test methods listed must be approved with the submitted test protocol prior to testing.

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

PERFORMANCE RESTRICTIONS

6. Temporarily Authorized Fuels: Subject to the conditions of this permit, the permittee may fire TDF in kiln No. 2 in addition to other authorized fuels for the duration of the testing period. [Rule 62-210.200(203), F.A.C.]

7. Heat Input Rate: The maximum total heat input rate for the No. 2 kiln system shall remain at 300 MMBtu per hour. The maximum heat input rate from firing TDF for kiln system No. 2 shall not exceed 20 % of the total heat input rate and shall not exceed 60 MMBtu per hour (24-hr average). The remaining 80% of the total heat input rate shall be from the firing of other authorized fuels. [Rule 62-4.070(3), F.A.C.]

EMISSIONS AND TESTING REQUIREMENTS

8. Emissions Standards: This permit does not establish any new emissions standards for Kiln system No. 2. Kiln No. 2 shall continue to comply with the requirements of all existing Department permits. [Rule 6-4.070(3), F.A.C.]

9. Baseline Emissions Test: Initial testing for Kiln No. 2 when firing only coal shall be performed to determine NO_X, CO, VOC, dioxin/furans (both raw mill on and raw mill off conditions), PM/PM_{10}, and visible emissions to establish baseline levels. Baseline tests shall be performed at permitted capacity, and prior to firing any TDF. Emissions above any permitted standard experienced during baseline testing shall be reported to the Department. The test period shall not commence until baseline testing demonstrates that the unit is in compliance and operating within the permitted limits. Additionally, the test period shall begin as soon as practicable following baseline testing, and in no case shall begin more than 45 days following baseline testing for any pollutant. [Rule 62-4.070(3), F.A.C.]

{Permitting note: Baseline coal emissions tests can be used for purposes of the annual compliance testing required by the facility's Title V air operation permit, provided all the criteria of the Title V permit are also met.}

10. Alternative Fuel Emissions Tests: During the test period, the permittee shall conduct tests to determine NO_X, CO, VOC, dioxin/furans (raw mill on and raw mill off), PM/PM_{10}, and visible emissions while co-firing the highest percentage of TDF that will be requested on a permanent basis. Additionally, the tests shall be conducted such that the average process rate, in terms of preheater feed rate, is nominally the same as the process rate achieved during the baseline emissions tests. [Rule 62-4.070(3), F.A.C.]

{Permitting Note: The NO_X and/or CO emissions testing is not required during TDF firing provided data from the CEMS is available, and all CEMS requirements of this permit have been satisfactorily met. If the CEMS fail to meet the requirements of this permit, additional testing may be required.}

11. Data Requirements: All test data shall be reported in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hr, lb/ton of clinker, lb/ton of dry feed) and ppmvd as propane. [Rule 62-4.070(3), F.A.C.]

12. Operating Rate During Testing: The permittee shall attempt to conduct all tests at permitted capacity, which is defined as 90 - 100 percent of the maximum operating rate allowed by applicable construction and operation permits (total heat input rate of coal and TDF). If the permittee is unable to operate at this level, any application for permanent authorization to fire TDF shall be limited to 110 percent of the tested operating rate. [Rule 62-4.070(3),F.A.C.]

13. Emission Rates During Testing: If the co-firing of TDF results in any emissions that are not in accordance with the existing construction and operation permits, co-firing of TDF shall cease immediately. Co-firing of TDF shall not resume until appropriate actions are taken to correct the problem. The Compliance Authority shall be notified within one working day upon such cessation and again prior to resuming TDF co-firing. [Rules 62-297.310(7) and 62-4.070(3),F.A.C.]

14. Test Notification: In order to afford the Department the opportunity to witness the tests, the owner or operator shall notify the Department, at least 15 days prior to the date on which each test during the test period is scheduled to begin. [Rule 62-297.310(7)(a)9., F.A.C.]

15. Test Methods: Required tests shall be performed in accordance with the following reference test methods. The following methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also be conducted in accordance with the requirements specified in Appendix SC of this permit. Other equivalent methods may be used only if written approval is obtained from the Bureau of Air Regulation prior to conducting the tests.

Method	Description
1 – 4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content *{Permitting note: Tests performed as necessary to support other methods.}*
5 or 201/201A	Particulate Matter (PM). The minimum sample volume shall be 30 dry standard cubic feet.
7E	Nitrogen Oxides (NO_X)
9	Visible Determination of Opacity
10	Carbon Monoxide (CO). The method shall be based on a continuous sampling train.
23	Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization – Instrumental)

[Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

MONITORING REQUIREMENTS

16. Fuel Use Monitoring: The permittee shall continuously monitor and record the amount of TDF being fired on a tons per hour basis. The permittee shall record the daily total tons of TDF fired, the daily and hourly average TDF firing rate (tons per hour), and the daily and hourly average heat input rate from each fuel fired in the kiln (MMBtu per hour). [Rule 62-210.200(203), F.A.C.]

REPORTING REQUIREMENTS

17. CEMS/Process Data Reporting: All valid NO_X and CO CEMS data (including periods of startup, shutdown, and malfunction) recorded prior to the test period, beginning immediately following certification of the CEMS, and all data recorded during the 90-day test period shall be included in the Final Report to the Department in a common electronic format and consistent with the procedures in Section III, Facility Wide Conditions, Specific Condition 1 of this permit. All emissions data should be reported in terms of parts per million (ppmvd), lb/ton of feed, lb/ton of clinker, and lb/hour. The electronic file shall also include hourly averages (or hourly estimates as appropriate) of the following process data during the 90-day trial: clinker production, dry kiln feed, percent heat input of each fuel, heat input rates for each fuel (MMBtu/hr), average hourly stack flow (dscfm), and amounts of ammonia injected by the SNCR system. [Rule 62-4.070(3), F.A.C.]

18. Stack Test Reports: The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements in Rule 62-297.310 (8), F.A.C. All stack test data collected during the field-testing program shall be submitted for review. For each test run, the report shall also indicate the information required by this permit. The permittee shall submit a written report that summarizes the results within 45 days of completing the stack tests. [Rule 62-297.310 (8), F.A.C.]

19. Final Report: Within 60 days of concluding the test period, the permittee shall submit a report summarizing the following: a complete description of the trial burn project; baseline emissions when firing coal; emissions when firing coal and tires; ambient conditions during each test; any other fuels fired during the trial period; fuel feed rates; and heat input rates for each fuel, and the maximum sustainable percentage of tire firing achieved. The final report shall detail any operational concerns related to the following items: kiln burner performance while firing TDF; control device performance; and opacity. Finally, the report shall include all CEMS and process data as required by Specific Condition 17 of this subsection. [Rule 62-4.070 (3), F.A.C.]

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

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.

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

EMISSIONS AND CONTROLS

1. 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. Circumvention: 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. VOC or OS Emissions: 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. Unconfined Particulate Emissions: 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.]

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. Calculation of Emission Rate: 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. Sampling Facilities: 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.

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. Annual Operating Report: 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

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Darlene A. Peterson ☐ Agent ☐ Addressee

B. Received by (Printed Name) Darlene A. Peterson
C. Date of Delivery 8/23/06

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number
(Transfer from service label) 7000 1670 0013 3110 1397

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

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CEMEX

July 27, 2006

UPS Overnight Delivery and Fax

Ms. Cindy Mulkey
Engineer, Bureau of Air Regulation
Division of Air Resource Management
2600 Blair Stone Rd MS #5505
Tallahassee, Fl 32399-2400

RE: CEMEX Cement, Inc.
Brooksville Cement Plant
CEMEX DEP File No 0530010-022-AC
Trial Burn Tires for Kiln #2

Dear Cindy:

Please find enclosed the original Proof of Publication of the public notice for the above referenced construction project. The public notice is dated July 21, 2006 and ran in the Hernando Today section of the Tampa Tribune.

If there are any questions concerning this information please contact me at (352) 799-2011

Sincerely,

CEMEX Cement, Inc.

Charles E. Walz
Environmental Manager

cc: File

United States Operations
P.O. Box 6, Brooksville, Florida. 34605-0006. USA. Phone: (352) 796-7241, Fax: (352) 754-9836

BEST AVAILABLE COPY

:RNANDO TODAY
lished Daily
)OKSVILLE, HERNANDO, FLORIDA
.TE OF FLORIDA
UNTY OF HERNANDO:
)re the undersigned authority personally
eared Sylvia Spivey, who
)ath says that he/she is Legal Ad Coordinator
he Hernando Today/Hernando Sunday, a daily
-spaper published at Brooksville in Hernando
)nty, Florida: that the attached copy of the
ertisement, being a Legal Notice .....
he matter of ...CEMEX/Brooksville Plant..
)lic Notice of Intent To Issue Permit.....
P File No. 0530010-022-AC.....
he ...n/a.....
)rt, was published in said newspaper in the
)es of ...July 21, 2006.....
.....
fiant further says that the said Hernando
day/Hernando Sunday is a newspaper pub-
)ed at Brooksville, in said Hernando County,
)rida, and that the said newspaper has hereto-
:e been continuously published in said
:rnando County, Florida, each week and has
en entered as a second class mail matter at the
st office in Brooksville, in said Hernando
)unty, Florida for a period of 1 year next pre-
ding the first publication of the attached copy
advertisement; and affiant further says
at he/she has neither paid nor promised any
rson, firm or corporation any discount, rebate,
)mmission or refund for the purpose of securing
is advertisement for publication in the said
:wspaper.

Sylvia Spivey
(Signature of Affiant)

Sworn to and subscribed before me this 21
ay of July, 2006

Denise Nohejl
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2008
Commission # DD 361939

(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

.....

Cemex/1790482

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0530010-022-AC

CEMEX Cement, Inc.
Brooksville Cement Plant
Kiln No. 2
Hernando County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit to CEMEX Cement, Inc. The permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel (TDF) in Kiln No. 2. The applicant's name and address are CEMEX Cement, Inc., Brooksville Cement Plant, Post Office Box 6, Brooksville, Florida 34605-0006.

The existing facility consists of two dry preheater kilns (Kiln No. 1 and Kiln No. 2). Both kilns are permitted to fire a variety of fuels including coal, fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. CEMEX is currently permitted to fire up to 20 percent waste tire derived fuel (WTDF) in Kiln No. 1.

CEMEX requested authorization to construct a tire feed system for Kiln No. 2, and to conduct temporary field-testing to determine site specific emission characteristics and technical feasibility of firing up to 20 percent whole tire derived fuel (TDF) in Kiln No. 2 on a permanent basis. Permanent use of the supplemental fuel would be an economic benefit for the facility. CEMEX has proposed to certify and collect data from the existing carbon monoxide (CO) and nitrogen oxide (NOx) continuous emissions monitors during the trial period, and to conduct testing for sulfur dioxide (SO2) to establish "baseline" (firing only coal) emissions to be compared to emissions while firing coal and TDF.

Based on a literature review and review of similar testing performed on other cement kilns, the Department believes that the request for a trial period to test the feasibility of firing TDF in Kiln No. 2 is reasonable. Information acquired during the test period is also necessary before the Department will consider authorizing the permanent use of TDF in Kiln No. 2. However, the Department will require additional testing to that proposed by the applicant including testing for NOx, CO, volatile organic compounds (VOCs), dioxin/furans, PM/PM10, and visible emissions during the trial period. No emissions above the levels are allowed during the trial period. Because there are no allowable

who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

The complete project file is available for public inspection during normal

conditions.
The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Permit. Written comments or requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 or the e-mail address provided below. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. If a petition for an administrative hearing on the Department's Intent to Issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent.

Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/744-6100
Fax: 813/744-6084

Thee complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Alvaro A. Linero, P.E., Program Administrator, South Permitting Section, Bureau of Air Regulation at: alvaro.linero@dep.state.fl.us and at 850/921-9523 or call 850/488-0114 for additional information. The application, key correspondence, draft permit and technical evaluation can be accessed at: http://www.dep.state.fl.us/Air/permitting/construction/cemex.htm
Publish: July 21, 2006

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

July 14, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael A. Gonzales, Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-006

Re: DEP File No. 0530010-022-AC
Brooksville Cement Plant - Brooksville, Hernando County

Enclosed is one copy of the Draft Air Construction Permit for the Brooksville Cement Plant on U.S. Highway 98, Brooksville, Hernando County. The Department's Intent to Issue Air Construction Permit, the Technical Evaluation, and the "Public Notice of Intent to Issue Air Construction Permit" are also included.

The "Public Notice" must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, such as a newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, Program Administrator, at the letterhead address. If you have any questions regarding this matter, please contact Cindy Mulkey at (850)921-8968 or Mr. Linero at (850)921-9523.

Sincerely,

For Jeffery J. Koerner

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/cm

Enclosures

In the Matter of an
Application for Permit by:

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

DEP File No. 0530010-022-AC
Brooksville Cement Plant Kiln No. 2
Hernando County, Florida

Authorized Representative:
Mr. Michael A. Gonzales, Plant Manager

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue a construction permit, copy of DRAFT Permit attached, for the proposed project as detailed in the application specified above and the attached Technical Evaluation for the reasons stated below.

The applicant, CEMEX Cement, Inc., applied on December 12, 2005 to the Department for a permit authorizing the use of tire derived fuel in Kiln No. 2 for a temporary trial period, and construction of a tire feeding system on Kiln No. 2 at the existing Brooksville Cement Plant northwest of Brooksville in Hernando County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emissions units will not adversely impact air quality, and the emissions units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of the enclosed Public Notice of Intent to Issue Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Construction Permit (including the Public Notice, Technical Evaluation and Preliminary Determination, and the DRAFT permit) was sent by certified mail (*) and copies were mailed by U.S. Mail or by electronic mail before the close of business on 7/14/06 to the persons listed:

Michael A. Gonzales, CEMEX*
Charles Walz, CEMEX
Jeet Gill, CEMEX
Mara Nasca, DEP SWD
John Koogler, P.E., Koogler & Associates
Segundo J. Fernandez, OHF&C

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.

(Clerk) 7/14/06 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0530010-022-AC

CEMEX Cement, Inc.
Brooksville Cement Plant Kiln No. 2

Hernando County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit to CEMEX Cement, Inc. The permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel (TDF) in Kiln No. 2. The applicant's name and address are CEMEX Cement, Inc, Brooksville Cement Plant, Post Office Box 6, Brooksville, Florida 34605-0006.

The existing facility consists of two dry preheater kilns (Kiln No. 1 and Kiln No. 2). Both kilns are permitted to fire a variety of fuels including coal, fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. CEMEX is currently permitted to fire up to 20 percent waste tire derived fuel (WTDF) in Kiln No. 1.

CEMEX requested authorization to construct a tire feed system for Kiln No. 2, and to conduct temporary field-testing to determine site specific emission characteristics and technical feasibility of firing up to 20 percent whole tire derived fuel (TDF) in Kiln No. 2 on a permanent basis. Permanent use of the supplemental fuel would be an economic benefit for the facility. CEMEX has proposed to certify and collect data from the existing carbon monoxide (CO) and nitrogen oxide (NO_X) continuous emissions monitors during the trial period, and to conduct testing for sulfur dioxide (SO_2) to establish "baseline" (firing only coal) emissions to be compared to emissions while firing coal and TDF.

Based on a literature review and review of similar testing performed on other cement kilns, the Department believes that the request for a trial period to test the feasibility of firing TDF in Kiln No. 2 is reasonable. Information acquired during the test period is also necessary before the Department will consider authorizing the permanent use of TDF in Kiln No. 2. However, the Department will require additional testing to that proposed by the applicant including testing for NO_X, CO, volatile organic compounds (VOCs), dioxin/furans, PM/PM_{10}, and visible emissions during the trial period. No emissions above the currently permitted levels are allowed during the trial period. Because there are no allowable emissions increases, a review of PSD applicability is not required.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Permit. Written comments or requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 or the e-mail address provided below. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. If a petition for an administrative hearing on the Department's Intent to Issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the

Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Alvaro A. Linero, P.E., Program Administrator, South Permitting Section, Bureau of Air Regulation at: alvaro.linero@dep.state.fl.us and at 850/921-9523 or call 850/488-0114 for additional information. The application, key correspondence, draft permit and technical evaluation can be accessed at: http://www.dep.state.fl.us/Air/permitting/construction/cemex.htm

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. 0530010-022-AC
Brooksville Cement Plant
Expiration date: April 1, 2007

PROJECT AND LOCATION

This permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel in Kiln No. 2 at CEMEX Cement's Brooksville Portland cement plant. 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

(DRAFT)

Joseph Kahn, P.E., Acting Director
Division of Air Resource Management

FACILITY DESCRIPTION

The existing facility consists of two dry process kilns with a preheater design, 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 788,400 ton per year of clinker. The plant is located on Highway 98, northwest of Brooksville in Hernando County, Florida.

PROJECT DESCRIPTION

This project allows the applicant to construct a tire feed system for Kiln No. 2 and to burn whole tire-derived fuel (TDF) in Kiln No. 2, for a designated trial period, in order to characterize and evaluate emissions from Kiln No. 2 while burning a combination of TDF and coal. Continuous emissions monitoring of CO and NO_x from certified continuous emissions monitoring systems (CEMS) are required during the trial period, as well as stack testing for dioxin/furan, VOC, PM/PM_{10}, and visible emissions.

EMISSIONS UNITS

This permit addresses the following emission units:

EU ID	Emissions Unit Description
003	Cement Kiln No. 1
014	Cement Kiln No. 2

REGULATORY CLASSIFICATION

Title III: The facility is a major source of hazardous air pollutants (HAP).

Title V: The facility is a Title V or "Major Source of Air Pollution" in accordance with Chapter 62-213, F.A.C. because the potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: The plant is located in an area that is designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. It is classified as a "portland cement plant", which is one of the facility categories listed at 62-210.200 (Major Stationary Source) 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 major source of air pollution with respect to Rule 62-212.400 F.A.C., Prevention of Significant Deterioration of Air Quality.

NSPS: Portions of the cement plant are subject to the following New Source Performance Standards (NSPS) in 40 CFR 60: Subpart A (General Provisions); Subpart Y (Coal Preparation Plants); and Subpart OOO (Non Metallic Mineral Processing). Any affected source subject to the provisions of 40 CFR 63, Subpart LLL (Portland Cement Manufacturing Industry) is exempt from any otherwise applicable new source performance standard contained in 40 CFR 60, Subpart F (Portland Cement Plants).

NESHAP: Portions of the cement plant are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63: Subpart A (General Provisions); and Subpart LLL (Portland Cement Manufacturing Industry).

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 allowance of whole tire derived fuel (TDF) and petroleum coke as fuels in Kilns No. 1 and No. 2, various throughput adjustments and other changes received October 14, 2005.
- Application for petroleum coke and TDF fuel trial burn, received December 12, 2005.
- Department's Request for Additional Information dated January 10, 2006.
- Applicant's response to RAI dated April 14, 2006.
- Koogler letter requesting withdrawal of petroleum coke from trial burn, received June 27, 2006.
- Department's Final Determination issued concurrently with this Final Permit.

1. General Conditions: 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 terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. 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. Construction and Expiration: 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. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), 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. Modifications: 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. Title V Permit: The scope of the temporary project included in this permit (Kiln No. 2 TDF trial burn) is to develop information in support of another project requesting permanent use of TDF in Kiln No. 2. Any future authorization to fire whole tire derived fuel would require a revision to the Title V air operation permit. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

The following conditions apply facility wide. (i.e., Kiln No. 1 and Kiln No. 2)

CEMS REQUIREMENTS

1. CEMS Certification: The NO_X and CO CEMS, and stack flow monitors shall be fully certified pursuant to Appendix B and functioning properly at least 30 days prior to the firing of TDF. A certification test schedule shall be submitted to the Department at least 30 days prior to certification. The Department shall be notified of any changes to the schedule at least 7 days prior to certification testing. Once certified, the CEMS (including flow monitor) shall be continuously operated to meet the quality assurance requirements of 40 CFR, Appendix F. If a CEMS fails to meet any of the requirements of certification, additional testing may be required for that system.

   [Rule 62-4.070(3), F.A.C., CFR Part 60, Appendix B, Performance Specification 2, and Appendix F]

2. CEMS Data Requirements: The CEMS shall be installed, calibrated, maintained, and operated in the kiln system main stack to measure and record the emissions of CO and NO_X in a manner consistent with the existing emission limits for the kiln systems. 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 @ 15% O_2 (parts per million dry volume corrected to 15 % oxygen).

   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).
      - Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, and malfunction.

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

3. Moisture Correction: When needed to determine concentration on a dry basis, the owner or operator shall install a system to determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). [Rules 62-4.070(3), F.A.C]

4. Ammonia Injection: Hours in which ammonia injection occurred by the SNCR system shall be noted and the amount of ammonia shall be recorded with the CEMS data in the data acquisition handling system DAHS. [Rules 62-4.070(3), F.A.C]

REPORTING REQUIREMENTS

5. CEMS Certification Reports: Within 30 days following certification of the CEMS, the permittee shall submit to the Department's Bureau of Ambient Monitoring and Mobile Sources, Emissions Monitoring Section, copies of the certification test reports which shall, at a minimum, meet the reporting requirements of 9.0 in Appendix B, Performance Specification 2.

   [Rule 62-4.070(3), F.A.C., CFR Part 60, Appendix B, Performance Specification 2]

AUTHORIZATION

6. Burners and SNCR: An application for permanent use of the kiln burners and SNCR currently in operation on Kiln No. 1 and Kiln No. 2 is pending with the Department.

A. Cement Kiln No. 2 (EU ID 014)

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

Emissions Unit 014 (Kiln No. 2)
Description: Dry preheater process kiln and clinker cooler system employing the Polysius GEPOL preheater design. Pillard Rotoflam ® burners in a semi-direct configuration were recently installed on Kiln No. 2 and an after-the-fact application for permanent authorization is pending. *Fuels*: Kiln No. 2 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. *Capacity*: Kiln No. 2 is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour. *Controls*: A baghouse is used on Kiln No. 2 for the control of PM emissions. There are no other permitted add-on controls for any of the other pollutants emitted from the kiln. Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of NO_X, SO_2, CO, and VOC. SNCR has been installed for NO_X control (after-the-fact application for permanent authorization is pending). *Monitors*: Emissions of CO and NO_X are continuously monitored on Kiln No. 2, however the CEMS are not certified. Additional CO and NO_X CEMS requirements are included in this permit. *Stack Parameters*: 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.

EQUIPMENT DESCRIPTION

1. Tire Feed System: The permittee is authorized to install and operate a tire feed system on Kiln No. 2 for temporary use of whole tire derived fuel. The tire feeder will be equipped with a double air lock system to prevent leakage in and out of the kiln during the tire feeding process and will be connected to the existing tire handling system. Upon completion of the 60-day trial burn period established in this permit, the permittee shall cease use of the tire feed system and of tire burning until further authorized by the Department. [Application, 62-4.070(3), F.A.C.]

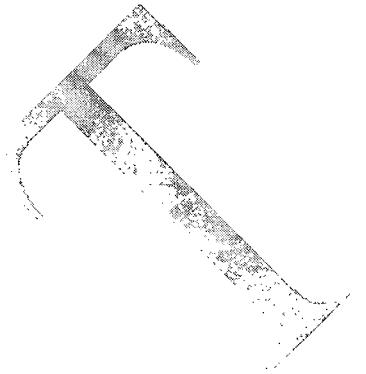
AUTHORIZATION

2. Relation to Other Permits: The conditions of this permit 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.]
3. Trial Use of TDF Firing: Subject to the conditions of this permit, the permittee is temporarily authorized to conduct a testing program to determine site specific emission characteristics and technical feasibility of firing up to 20 percent TDF in kiln system No. 2. Kiln system No. 2 (Units 014, and 015) shall remain subject to the conditions of all existing permits related to air pollution and control equipment during the field-testing program. [Rule 62-4.070(3), F.A.C.]
4. Schedule and Expiration: Beginning no earlier than 30 days from certification of the CEMS (pursuant to Section III, Facility Wide Conditions, Specific Condition 1), the permittee may begin testing tires as per this permit. Testing shall occur over a 60 consecutive calendar day period ("testing period") and shall end no later than March 1, 2007. At least 30 calendar days of data shall be recorded by the "certified" CO and NO_X CEMS (including flow data) prior to any TDF being fired in Kiln No. 2. [Rule 62-4.070(3), F.A.C.]
5. Trial Period Summary and Testing Protocol: The permittee shall submit to the Permitting and Compliance Authorities a summary outlining the testing objectives and a detailed testing protocol for the testing period

at least 45 days prior to the beginning of the testing period. Approval of the testing protocol must be obtained from the Permitting Authority prior to firing any TDF in Kiln No. 2. The permittee shall submit updates to the testing protocol and testing schedule as necessary, but no later than 7 days prior to any scheduled test. At a minimum the trial period summary and testing protocol shall include the following information:

a. testing summary including outline, objectives, etc.,
b. testing schedule,
c. test methods to be used,
d. sampling locations,
e. quantity and duration of test runs for each test,
f. expected process rates during testing,
g. contact information for facility and test team,
h. audit samples to be used,
i. description of internal QA/QC procedures used by test team, and
j. any deviation from any of the test methods listed must be approved with the submitted test protocol prior to testing.

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



PERFORMANCE RESTRICTIONS

6. Temporarily Authorized Fuels: Subject to the conditions of this permit, the permittee may fire TDF in kiln No. 2 in addition to other authorized fuels for the duration of the testing period. [Rule 62-210.200(203), F.A.C.]

7. Heat Input Rate: The maximum total heat input rate for the No. 2 kiln system shall remain at 300 MMBtu per hour. The maximum heat input rate from firing TDF for kiln system No. 2 shall not exceed 20 % of the total heat input rate and shall not exceed 60 MMBtu per hour (24-hr average). The remaining 80% of the total heat input rate shall be from the firing of other authorized fuels. [Rule 62-4.070(3), F.A.C.]

EMISSIONS AND TESTING REQUIREMENTS

8. Emissions Standards: This permit does not establish any new emissions standards for Kiln system No. 2. Kiln No. 2 shall continue to comply with the requirements of all existing Department permits. [Rule 6-4.070(3), F.A.C.]

9. Baseline Emissions Test: Initial testing for Kiln No. 2 when firing only coal shall be performed to determine NO_X, CO, VOC, dioxin/furans (both raw mill on and raw mill off conditions), PM/PM_{10}, and visible emissions to establish baseline levels. Baseline tests shall be performed at permitted capacity, and prior to firing any TDF. Emissions above any permitted standard experienced during baseline testing shall be reported to the Department. The test period shall not commence until baseline testing demonstrates that the unit is in compliance and operating within the permitted limits. [Rule 62-4.070(3), F.A.C.]

{Permitting note: Baseline coal emissions tests can be used for purposes of the annual compliance testing required by the facility's Title V air operation permit, provided all the criteria of the Title V permit are also met.}

10. Alternative Fuel Emissions Tests: During the test period, the permittee shall conduct tests to determine NO_X, CO, VOC, dioxin/furans (raw mill on and raw mill off), PM/PM_{10}, and visible emissions while co-firing the highest percentage of TDF that will be requested on a permanent basis. Additionally, the tests shall be conducted such that the average process rate, in terms of preheater feed rate, is nominally the same as the process rate achieved during the baseline emissions tests. [Rule 62-4.070(3), F.A.C.]

    {Permitting Note: The NO_X and/or CO emissions testing is not required during TDF firing provided data from the CEMS is available, and all CEMS requirements of this permit have been satisfactorily met. If the CEMS fail to meet the requirements of this permit, additional testing may be required.}

11. Data Requirements: All test data shall be reported in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hr, lb/ton of clinker, lb/ton of dry feed) and ppmvd as propane corrected to 7% oxygen. [Rule 62-4.070(3), F.A.C.]

12. Operating Rate During Testing: The permittee shall attempt to conduct all tests at permitted capacity, which is defined as 90 - 100 percent of the maximum operating rate allowed by applicable construction and operation permits (total heat input rate of coal and TDF). If the permittee is unable to operate at this level, any application for permanent authorization to fire TDF shall be limited to 110 percent of the tested operating rate. [Rule 62-4.070(3),F.A.C.]

13. Emission Rates During Testing: If the co-firing of TDF results in any emissions that are not in accordance with the existing construction and operation permits, co-firing of TDF shall cease immediately. Co-firing of TDF shall not resume until appropriate actions are taken to correct the problem. The Compliance Authority shall be notified within one working day upon such cessation and again prior to resuming TDF co-firing. [Rules 62-297.310(7) and 62-4.070(3),F.A.C.]

14. Test Notification: In order to afford the Department the opportunity to witness the tests, the owner or operator shall notify the Department, at least 15 days prior to the date on which each test during the test period is scheduled to begin. [Rule 62-297.310(7)(a)9., F.A.C.]

15. Test Methods: Required tests shall be performed in accordance with the following reference test methods. The following methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. Tests shall also be conducted in accordance with the requirements specified in Appendix SC of this permit. Other equivalent methods may be used only if written approval is obtained from the Bureau of Air Regulation prior to conducting the tests.

Method	Description
1 – 4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content *{Permitting note: Tests performed as necessary to support other methods.}*
5 or 201/201A	Particulate Matter (PM). The minimum sample volume shall be 30 dry standard cubic feet.
7E	Nitrogen Oxides (NO_X)
9	Visible Determination of Opacity
10	Carbon Monoxide (CO). The method shall be based on a continuous sampling train.
23	Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization – Instrumental)

[Rules 62-204.800 and 62-297.100, F.A.C.; 40 CFR 60, Appendix A]

MONITORING REQUIREMENTS

16. Fuel Use Monitoring: The permittee shall continuously monitor and record the amount of TDF being fired on a tons per hour basis. The permittee shall record the daily total tons of TDF fired, the daily and hourly average TDF firing rate (tons per hour), and the daily and hourly average heat input rate from each fuel fired in the kiln (MMBtu per hour). [Rule 62-210.200(203), F.A.C.]

REPORTING REQUIREMENTS

17. CEMS/Process Data Reporting: All valid NO_X and CO CEMS data (including periods of startup, shutdown, and malfunction) recorded prior to the test period, beginning immediately following certification of the CEMS, and all data recorded during the 60-day test period shall be included in the Final Report to the Department in a common electronic format and consistent with the procedures in Section III, Facility Wide Conditions, Specific Condition 1 of this permit. All emissions data should be reported in terms of parts per million (ppmvd), lb/ton of feed, lb/ton of clinker, and lb/hour. The electronic file shall also include hourly averages (or hourly estimates as appropriate) of the following process data during the 60-day trial: clinker production, dry kiln feed, percent heat input of each fuel, heat input rates for each fuel (MMBtu/hr), average hourly stack flow (dscfm), and amounts of ammonia injected by the SNCR system. [Rule 62-4.070(3), F.A.C.]

18. Stack Test Reports: The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements in Rule 62-297.310 (8), F.A.C. All stack test data collected during the field-testing program shall be submitted for review. For each test run, the report shall also indicate the information required by this permit. The permittee shall submit a written report that summarizes the results within 45 days of completing the stack tests. [Rule 62-297.310 (8), F.A.C.]

19. Final Report: Within 60 days of concluding the test period, the permittee shall submit a report summarizing the following: a complete description of the trial burn project; baseline emissions when firing coal; emissions when firing coal and tires; ambient conditions during each test; any other fuels fired during the trial period; fuel feed rates; and heat input rates for each fuel, and the maximum sustainable percentage of tire firing achieved. The final report shall detail any operational concerns related to the following items: kiln burner performance while firing TDF; control device performance; and opacity. Finally, the report shall include all CEMS and process data as required by Specific Condition 17 of this subsection. [Rule 62-4.070 (3), F.A.C.]

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

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.

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

EMISSIONS AND CONTROLS

1. 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. Circumvention: 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. VOC or OS Emissions: 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. Unconfined Particulate Emissions: 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.]

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. Calculation of Emission Rate: 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. Sampling Facilities: 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.

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. Annual Operating Report: 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

TECHNICAL EVALUATION

CEMEX Cement, Inc.
Brooksville Cement Plant

Tire Derived Fuel Testing Kiln No. 2

Hernando County

DEP File No. 0530010-022-AC

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation

July 14, 2006

I. APPLICATION INFORMATION

A. APPLICANT NAME AND ADDRESS

Michael A. Gonzales, Plant Manager
CEMEX Cement, Inc.
Brooksville Cement Plant
Post Office Box 6
Brooksville, Florida 34605-0006

B. PROCESSING SCHEDULE

- Received application (0530010-018-AC) for allowance of whole tire derived fuel (TDF) in Kiln No. 2, and petroleum coke as fuel in Kilns No. 1 and No. 2, various throughput adjustments, and removal of thallium requirements October 14, 2005.
- Received application (0530010-022-AC) for petroleum coke and whole tire derived fuel trial burn for Kiln No. 1 and 2 December 12, 2005.
- Department's Request for Additional Information dated January 10, 2006.
- Applicant's response to RAI dated April 14, 2006.
- Koogler letter requesting withdrawal of petroleum coke from original application and the trial burn project, received June 21, 2006.
- Department's Final Determination issued concurrently with this Final Permit.

C. FACILITY LOCATION

The CEMEX Brooksville Cement Plant is located on Highway 98, northwest of Brooksville in Hernando County.

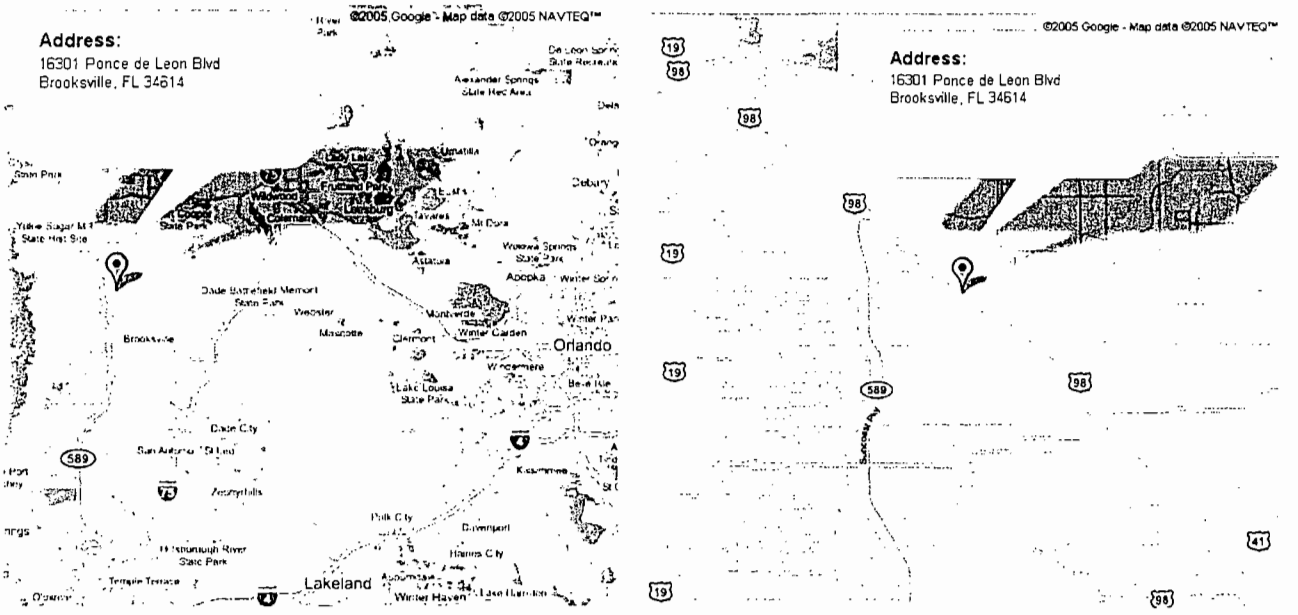


Figure 1. Location of the CEMEX Brooksville Cement Plant in Hernando County

D. FACILITY CLASSIFICATION CODE (SIC)

Major Group No. 32, Clay, Glass, and Concrete Products
Industry Group No. 324 Cement, Hydraulic
Industry No. 3241 Cement, Hydraulic

II. FACILITY INFORMATION

A. FACILITY DESCRIPTION

The existing Brooksville portland cement plant consists of two Polysius GEPOL preheater kilns (Kilns No. 1 and No. 2). Each kiln and clinker cooler combination is separately permitted with respect to preheater material feed rates and fuel heat input rates. Ancillary equipment at the plant includes raw mills, finish mills, cement and clinker handling equipment, coal handling equipment and silos, and particulate control/dust collection and recycling equipment.

A single, large, fabric filter system (baghouse) is used to capture particulate matter from each kiln and from each clinker cooler (four total). Smaller baghouses are used to limit particulate emissions from other process emissions points. There are no other permitted add-on controls for any pollutants emitted from the cement kilns. However, new burners and SNCR were recently installed on both kilns for NO_X control (after-the-fact application for permanent authorization pending). Raw material properties, chemical reactions in the kilns, absorption into the clinker, and combustion controls minimize emissions of NO_X, SO_2, CO, and VOC.

In order to restrict the net emissions of air pollution, current permits limit the production capacity by setting maximum preheater feed rates. All of the emission limits for the kilns at CEMEX Brooksville are expressed in terms of mass of pollutant per mass of preheater feed. Many dry process preheater kilns in the state have emission limits expressed as "lb/ton of clinker". Both CEMEX Brooksville kilns are limited to 150 tons dry preheater feed per hour (30 day average) with a maximum of 165 tons preheater feed in any given hour.

The maximum daily heat input rate for each kiln is 300 MMBtu/hr. Both kilns are permitted to burn a variety of fuels, including coal, No. 2 fuel oil, No. 4 fuel oil, No. 5 fuel oil, No. 6 fuel oil, natural gas, and on-site generated, non-hazardous waste used oil, grease, and rags. Kiln No. 1 is also permitted to fire whole tire derived fuel (TDF) at a rate up to 20 percent of the total heat input on a British thermal unit (Btu) basis, or 2.14 tons TDF per hour.

B. REGULATORY CATEGORIES

Title III: The existing facility has the potential to emit 10 tons per year or more of any one hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, and is therefore considered a major source of hazardous air pollutants (HAPs).

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

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

PSD: The project is located in an area designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard (NAAQS). The facility is considered a "portland cement plant," which is one of the 28 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.

NSPS: Portions of the cement plant are subject to the following New Source Performance Standards (NSPS) in 40 CFR 60: Subpart A (General Provisions); Subpart Y (Coal Preparation Plants); and Subpart OOO (Non Metallic Mineral Processing). Any affected source subject to the provisions of 40 CFR 63, Subpart LLL (Portland Cement Manufacturing Industry) is exempt from any otherwise

applicable new source performance standard contained in 40CFR 60, Subpart F (Portland Cement Plants).

NESHAP: Portions of the cement plant are subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63: Subpart A (General Provisions); and Subpart LLL (Portland Cement Manufacturing Industry).

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

III. PROPOSED PROJECT SUMMARY

A. BACKGROUND

On October 14, 2005, the Department received an application (0530010-018-AC) for several projects at the CEMEX Brooksville facility. Included in this application was a request for the authorization to fire petcoke in Kiln No. 1 and Kiln No. 2, and to fire whole tire derived fuel (TDF) in Kiln No. 2. The Department established that a trial burn is necessary to characterize and evaluate emissions while burning the alternate fuels before a determination of whether to authorize their use can be made. On December 12, 2005 CEMEX submitted an application (0530010-022-AC) for authorization to conduct a trial burn on Kilns 1 and 2 to evaluate the use of petcoke and tires. On June 28, 2006 the Department received a letter from Koogler & Associates, for CEMEX, requesting removal of the request for permanent use of petcoke from the original application (0530010-018-AC) and from the subsequent trial burn application.

B. PROJECT DESCRIPTION

The project, as originally proposed by the applicant, was for authorization to fire petcoke in Kilns 1 and 2, and to fire TDF in Kiln 2 for a limited trial period. The following summarizes the details of the initial request:

- 180 day trial period
- Authority to fire up to 100 % petcoke in both kilns during the trial period
- Authority to fire up to 20 % TDF in Kiln No. 2 during the trial period
- Recognition that SNCR and low-NO_X burners were recently installed on both kilns
- All limits for both kilns be lifted during the trial period
- Certification of the recently installed CO and NO_X CEMS on both kilns
- Additional testing of SO_2 emissions while burning petroleum coke and TDF in varying amounts

Additional information included in a response to a Department request indicated that a tire feeding system, identical to the system on Kiln No. 1, would also need to be installed on Kiln No. 2. According to the applicant, the feeder will be equipped with a double air lock system to prevent leakage in and out of the kiln during the tire feeding process. There is currently a tire storage area and a tire handling system in place for Kiln No. 1. The tire handling system has recently been automated and will supply both tire feeders.

As mentioned above, on June 28th the request to fire petcoke during the trial period was withdrawn from the trial burn project. Accordingly, this project is now limited to the firing of tires in Kiln No. 2 while conducting various emissions testing, certification of the installed CEMS on both kilns, and authorization and temporary use of the tire feeding system for Kiln No. 2.

IV. Rule Applicability

A. State Regulations

The project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). The state rules and regulations of the Florida Administrative Code applicable to this project include but are not limited to the following:

Table 1. State Regulations Applicable to Portland Cement Plants.

Chapter 62-4	Permits.
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.360	Designation of Prevention of Significant Deterioration Areas
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Chapter 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.570	Test Reports
Rule 62-297.520	EPA Continuous Monitor Performance Specifications
Rule 62-297.701	Portland Cement Plants

B. Federal Regulations

This project is also subject to certain applicable federal provisions regarding air quality as established by the EPA in the Code of Federal Regulations (CFR) and summarized below.

Table 2. Federal Regulations Applicable to Portland Cement Plants.

40 CFR 50	National Primary and Secondary Ambient Air Quality Standards
40 CFR 60, Subpart A	General Provisions
40 CFR 60, Subpart F	Standards of Performance for Portland Cement Plants
40 CFR 60, Subpart Y	Standards of Performance for Coal Preparation Plants
40 CFR 60, Subpart OOO	Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR 63, Subpart A	General Provisions
40 CFR 63, Subpart LLL	National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry – Major Sources

C. PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's PSD program, as defined in Rule 62-212.400, F.A.C. and approved by EPA in the State Implementation Plan. A PSD review is only required in areas that are currently in attainment with the NAAQS for a given pollutant or

areas designated as "unclassifiable" for the pollutant. A facility is considered "major" with respect to PSD if the facility emits or has the potential to emit:

- 250 tons per year or more of any regulated air pollutant, or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 Major Facility Categories (62-210.200-1, F.A.C.), or
- 5 tons per year of lead.

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates listed in 62-210.200(Definitions, Significant Emission Rate), F.A.C. Projects that result in a significant net emissions increase are considered "major modifications." For each significant pollutant, the applicant must not only employ Best Available Control Technology (BACT) to minimize emissions but also conduct an appropriate ambient impact analyses. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several significant regulated pollutants.

As previously established, this facility is a "major source" with respect to the PSD regulations. However, this temporary field-test of tire derived fuel is not a "major modification" to the existing major source. The field-test for TDF is a limited, short-term evaluation to determine (1) whether there are unforeseen operational problems with firing TDF, and (2) whether Kiln No. 2 can meet the existing emission limits when adding TDF as an allowable supplemental fuel. The current emission limits are not waived during the field test, and neither emissions nor production in excess of current permits are allowed by the temporary field-test permit.

Because no long-term, permanent modification, or increase in potential emissions is being authorized, the Department does not consider this field-test to be a "major modification" for purposes of the PSD regulations.

V. DEPARTMENT REVIEW

Supplementing fuel combustion with TDF has become an attractive alternative for certain industrial processes, including cement kilns. Scrap tires are readily available, relatively inexpensive, and have a higher heating value than bituminous coal. Fuel costs can be substantially lowered when using TDF as a supplemental fuel, and overall emissions of NO_X can actually be reduced[1]. The high temperatures, long residence times, and inherent scrubbing that take place within a cement kiln provide an environment conducive to the destruction of many problem organic substances[2]. For these reasons, firing TDF in cement kilns has become relatively common practice in the United States and other countries. Combustion of used tires also helps to alleviate the problems associated with stockpiling or landfilling of the waste tires.

However, because of the composition of waste tires, there are concerns regarding potential emissions of criteria and other pollutants resulting from the burning of TDF. "Burning tires can result in emissions of criteria pollutants such as carbon monoxide (CO), nitrogen and sulfur oxides (NO_X and SO_X), particulate matter (PM), hydrocarbons (HC): and non-criteria pollutants such as arsenic, cadmium, chromium, lead, zinc, dioxins and furans (D/F), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), benzene and other organic compounds."[3]

Both kilns at the CEMEX Brooksville facility are dry, preheater kilns, a configuration in which all of the primary fuel is added at the lower discharge end of the kiln and essentially all combustion of the fuel takes place within the kiln. Additional fuels such as tires can be added mid kiln or directly into the riser duct at the base of the preheater. Kiln No. 1, originally permitted in 1973, has been authorized to use up to 20 percent TDF as a supplemental fuel since 1994. Tire derived fuel is now regularly fired in Kiln No. 1. Tires are introduced at the base of the preheater.

A. CHARACTERISTICS OF TDF

Tires are manufactured from petrochemical feedstocks such as styrene and butadiene (both potential carcinogens).[4] Tire derived fuel is composed mainly of hydrocarbons and steel with a range in metal content (zinc, iron, chromium, cadmium, and lead). Some amount of chlorine is also present in TDF. The following table is a comparison of the ultimate composition of tires and coal from a publication found on the Malcolm Pirnie website.[5] It can be seen from the table that like coal, TDF is composed mainly of carbon, but it has a higher calorific value than coal and contains less ash.

Table 1. Comparison of Bituminous Coal and TDF Analysis

	Ultimate Analysis (% by weight)								
Fuel Type	**Volatiles****	**Heating Value (Btu/lb)**	**Carbon**	**Hydrogen**	**Oxygen**	**Nitrogen**	**Sulfur**	**Chlorine**	**Ash**
Passenger Tires		15,843	89.48	7.61	<0.01	0.27	1.88	0.07	3.9
Truck Tires		14,968	89.68	7.50	<0.01	0.25	2.09	0.06	5.5
TDF	66.6	15,688	89.51	7.59	<0.01	0.27	1.92	0.07	4.2
Bituminous Coal	28.3	13,560	75.8	5.1	8.2	1.5	1.6	0.11*	7.8

*Value not included in Malcom Pirnie Publication, table supplemented by information from Golder Reference [6]
**Values not included in Malcom Pirnie Publication, table supplemented by information from Kaantee Reference[7]

Tire derived fuel can be fed into the kiln as whole tires, or the tires can be shredded prior to introduction into the kiln. The applicant proposes the introduction of whole tires into Kiln No. 2.

B. Potential Impacts of Tire Derived Fuels on Emissions

Air emissions from relatively low temperature, open tire fires are highly toxic, with high concentrations of criteria pollutants (NOx, SOx, CO, and VOCs) as well as hazardous air pollutants including PAHs, D/F, hydrogen chloride, benzene, PCBs and metals. Dioxin/furans are byproducts of the combustion of organic compounds. Optimum temperatures for dioxin/furan production have been shown to be 200 to 450 °C which may occur in open fires, home woodstoves, and during cooling of high temperature combustion byproducts (such as cement kiln dust).[8]

The combustion of tires will result in emissions of several criteria and non-criteria pollutants as stated above. However, the question as related to this project is not whether burning of tires will result in these emissions, but whether total emissions will actually increase as a result of burning a certain percentage of TDF along with the primary fuel (in this case coal).

Over the past two decades several studies, similar to the proposed project, have been undertaken to evaluate the feasibility of firing TDF as a supplemental fuel in cement kilns as well as other industrial processes. One recent study entailed the collection of results of stack tests performed while burning TDF as a supplemental fuel and while burning only the primary fuel for comparison. The general trends observed are listed in Table 2. It should be noted that the "effect" in the table reflects the overall general trend in emissions for each pollutant. Pollutants showing no effect (none) is a result of some of the testing showing slight increases, while others showed slight decreases for that particular pollutant. This is an indication that a definitive increase or decrease in those pollutants cannot be accurately predicted when burning a percentage of TDF.[9]

Table 2. General Expected Effects of TDF On Emissions

Pollutant	Expected Effect of TDF/Scrap Tire
CO	None
SO2	None
NOx	Decrease
PM	None
Total Hydrocarbons	None
Zinc	Increase
Other Metals	None or Decrease
Dioxins/Furans	None
Benzene	Decrease
Formaldehyde	Decrease
Semi-volatiles	Decrease

The above results are consistent with a USEPA report citing that "with the exception of zinc emissions, potential emissions from TDF are not expected to be very much different from other conventional fossil fuels, as long as combustion occurs in a well-designed, well-operated, and well-maintained combustion device"[10].[Emphasis added.] The data above is also consistent with claims of NO_X reductions as a result of firing TDF.

A comparison of emissions under baseline conditions firing coal, and emissions while firing coal and TDF was performed in 1993 on the Brooksville Kiln No. 1.[11] Tests included PM, SO_2, THC (total hydrocarbons), CO, NO_X, HCl, speciated VOCs (volatile organic compounds), metals, and D/F. The conclusion made by the consultant, was that "the use of TDF to provide up to 20 % of the heat input to Kiln No. 1 has no effect on emissions, operations, or clinker quality." Emissions of zinc were shown to be significantly greater when firing the TDF/coal mixture, which is consistent with other studies. Also, the concentrations of D/F were reported as below the limit of detection under both sets of operating conditions.

More recent D/F testing on both kilns however, has shown elevated levels of D/F and inconsistencies between the two kilns. Dioxin/furans remain a pollutant of special concern at this facility, and the Department has reason to conclude that D/F testing while firing TDF in Kiln No. 1 is not directly applicable to Kiln No. 2.

C. Conclusions

The use of TDF as a fuel supplement in dry preheater cement kilns, such as Brooksville Kilns No. 1 and No. 2, is no longer an uncommon practice. Many studies have been carried out over the years in order to characterize emissions from these types of kilns while firing TDF with the primary fuel, including the 1993 testing of Kiln No. 1.

However, the Department agrees that "the quantity of emissions from burning tires as a supplemental fuel, and the relative emissions compared to operating the facility without this supplemental fuel, can only be determined by emissions testing."[12] The use of up to 20 percent TDF during a temporary trial period will be authorized provided certain testing requirements, as specified by the Department, are met. Additional testing beyond that proposed by the applicant will be required.

VI. Testing Requirements

A. Emissions During Trial Period

The purpose of the trial burn is to determine whether TDF (up to 20 percent by heat input) can be fired in Kiln No. 2 while maintaining emissions at current levels. Emissions in excess of current standards are not permitted during the trial period. If the co-firing of TDF results in any emissions that are not in accordance with the existing construction and operation permits, co-firing of TDF shall cease immediately. Additionally, production and process rates in excess of currently permitted limits are not authorized during the trial period.

B. Compliance Demonstration

CEMEX will be required to conduct testing to establish baseline emissions while firing no TDF. Further testing will be required while firing up to 20 percent TDF in order to evaluate the effect on emissions. A detailed testing protocol will be required prior to testing as well as the certification of the existing CEMS on both kilns as stated in the application. Submittal of all stack test reports, CEMS certification reports, as well as a summary report of the trial period is required. Testing for the following pollutants will be required to establish baseline emissions and to characterize emissions while firing TDF for comparison:

- CO (CEMS data may replace testing if specific requirements are met)
- NO_X (CEMS data may replace testing if specific requirements are met)
- Particulate Matter
- VOC
- Dioxin/Furans (raw mill up and raw mill down)
- Visible Emissions

VII. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable State and Federal air pollution regulations as conditioned by the Draft Permit. This conclusion is based on a technical review of the information submitted by the applicant, other reasonable assurances provided by the applicant, a review of the available literature, and the conditions specified in the draft permit. Cindy Mulkey is responsible for reviewing the application, preparing the technical evaluation, and drafting the permit. Scott M. Sheplak, P.E. is the engineer overseeing the project and will be responsible for sealing the evaluation. Additional details of this analysis may be obtained by contacting the project engineer at (850)921-8968 or the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida, 32399-2400.

References

[1] Publication, May, M.S., and Walters, L., *Cement Americas*, "Low-NO_X Tire-derived Fuel for the Reduction of NO_X from the Portland Cement Manufacturing Process", August 1999.

[2] Report, USEPA OAQPS, "Burning Tires for Fuel and Tire Pyrolysis: Air Implications, December 1991.

[3] Report to the Legislature, California Integrated Waste Management Board, Tires as a Fuel Supplement: Feasibility Study, January 1992.

[4] Webpage, What to do with Used Tires, Burning Issues, http://www.webcom.com/~bi/tires.htm, Accessed July 1, 2006.

[5] Publication, Karell, M., *Air Currents*, "Regulation Impacts on Scrap Tire Combustion: Part II, February 2000.

[6] Reference, Golder Associates, Inc., Survival Reference Guide, April 2003.

[7] Extended Abstract. Kääntee, U., Zevenhoven, R., and Backman, R., *XVII Nordic Concrete Research Symposium,* "Alternative Fuels: The Impact of Alternative Fuels on the Cement Manufacturing Process.", Helsingör, Denmark, 12-14 June 2002.

[8] Study, Kirk, L., University of Idaho, "Potential Dioxin Release Associated with Tire Derived Fuel Use in a Cement Kiln Gallatin County, Montana, December 2000.

[9] Publication, Karell, M., *Air Currents*, "Regulation Impacts on Scrap Tire Combustion: Part II, February 2000.

[10] Report, USEPA, Report No. 600/R-97-115, "Air Emission From Scrap Tire Combustion", October 1997.

[11] Comparative Emissions Report, Koogler & Associates Environmental Services, "Comparison of Particulate Matter, Sulfur Dioxide, Total Hydrocarbons, Carbon Monoxide, Nitrogen Oxides, Hydrogen Chlorides, Speciated Volatile Organics, Metals and Dioxins/Furans Emission Measurements and Opacities of Emissions Under Baseline and Coal/TDF Firing Conditions, May and June 1993.

[12] Report to the Legislature, California Integrated Waste Management Board, "Tires as a Fuel Supplement; Feasibility Study, January 1992.

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

P.E. Certification Statement

Applicant:
CEMEX Cement, Inc.
Brooksville Cement Plant

Permit No.: 0530010-022-AC

Project Type: Air Construction Permit
Testing of Tire Derived Fuel (TDF) Combustion in Kiln No. 2

I HEREBY CERTIFY *that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).*

Scott M. Sheplak — 07/12/06
Scott M. Sheplak — Date
Professional Engineer (P.E.)
License Number 48866

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/921-9532
Fax: 850/921-9533

SMS/CEM

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

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07/12/06
Date

Scott M. Sheplak
Professional Engineer (P.E.)
License Number 48866

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/921-9532
Fax: 850/921-9533

SMS/CEM

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Sandra Taylor ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery 7/20/06

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number (Transfer from service label) 7000 1670 0013 3110 0956

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

U.S. Postal Service
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Postmark Here

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

PS Form 3800, May 2000 See Reverse for Instructio

7000 1670 0013 3110 0956

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-05-11
July 27, 2006

Via Email and UPS Overnight

Ms. Cindy Mulkey
FDEP
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Cemex Cement, Inc.
Brooksville Cement Plant
FDEP File 0530010-022-AC
Comments on Draft Permit

Dear Cindy:

Following are comments on the above captioned Draft Air Construction Permit issued to Cemex Cement, Inc. (Cemex). The permit authorizes Cemex to install a tire feed system on Kiln No. 2 at their Brooksville Cement Plant and to conduct temporary testing to establish site specific emission characteristics for Kiln No. 2 while burning Whole Tire Derived Fuel. The draft permit was issued on July 14, 2006. These comments are provided for the Department's review within the 14 day comment period established by Rule.

The following comments are referenced by Permit Condition number and/or page number of the draft permit.

Cover Page – expiration date.

Comment: The expiration date shown in the draft permit is May 1, 2007. Cemex estimates that it will require approximately seven months to get funding for the project, order the equipment for the tire feed system and install the equipment on Kiln No. 2. Beyond that, there should be an allowance of approximately a month for equipment shake down; approximately two months for CEMs certification, baseline emission testing and the development of baseline emission data; approximately three months for the trial burn period (see following comment) and two months as a contingency. This places the time of completion of the test period around November 1, 2007. For purposes of permit expiration, we are requesting a permit expiration date of December 31, 2007.

Section IV.A, Condition No. 4 (page 8 of 11)

Comment: Condition No. 4 specifies that the tire derived fuel test period shall end no later than March 1, 2007. In view of the schedule outlined in the preceding comment, we are requesting that this condition be amended to state that the test period shall end no later than December 31, 2007.

Also in this condition, and in Condition No. 1 of this same section, the permit states that the trial burn period for Whole Tire Derived Fuel shall be 60 consecutive calendar days in duration. We are requesting that Cemex be authorized to burn Whole Tire Derived Fuel in Kiln No. 2 for 90 operating days.

The 90 operating day trial burn period will give Cemex the time to balance the kiln while firing Whole Tire Derived Fuel and to develop a representative record of emission data. Furthermore, by defining the trial burn period in terms of operating days, Cemex will have the flexibility to work around unscheduled kiln outages.

Section III, Condition No. 2 (page 6 of 11)

Comment: This condition requires that the CO and NOx CEMS data be reported as one-hour averages in the units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd corrected to 15 percent oxygen. Cemex has no concern regarding the reporting of emissions in the units of pounds per ton of kiln feed, pounds per ton of clinker, and pounds per hour. And, the company has no concern with reporting the concentrations of CO and NOx (ppmvd) but sees no reason for correcting the concentration data to 15 percent oxygen. There are no permit conditions, regulatory standards or Department rules that require such a correction. Cemex, therefore, requests that the requirement to correct the CO and NOx concentration data to 15 percent oxygen be deleted from the permit.

Section IV.A., Condition No. 9 (page 9 of 11)

Comment: This condition establishes requirements for the baseline emission tests and includes the note that these emission tests can be used to satisfy the annual compliance testing requirement of the facility Title V Air Operating Permit. The baseline emission

testing is for CO, NOx, VOC, PM/PM10, visible emissions and D/F (the latter with the raw mill operating and with the raw mill off).

Cemex has the annual compliance testing for Kiln No. 2 (and Kiln No. 1) scheduled for the week of September 11, 2006. This compliance testing will include all the emission testing required by Condition No. 9, except for the D/F testing. Cemex would like the option of using the scheduled September 2006 compliance test data as the baseline data for Kiln No. 2. Regarding the baseline D/F testing, Cemex is planning D/F testing on Kiln No. 2 with the raw mill not operating later in 2006 and conducted D/F testing on Kiln No. 2 to reset the 30-month clock for tests with the raw mill operating in January 2006. Cemex would like the option of using these two D/F emission tests as baseline tests for the purposes of this permit condition.

Section IV.A., Condition No. 11 (page 10 or 11)

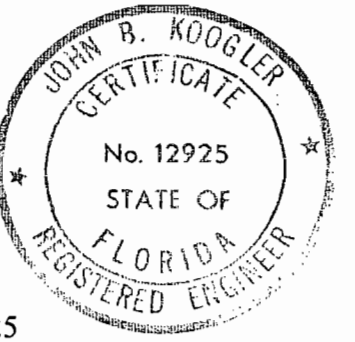
Comment: This condition requires that VOC emission data be expressed in several units including concentration (ppmvd) corrected to seven percent oxygen. There is no permit condition, regulatory requirement or Department rule that requires correcting VOC concentration data to seven percent oxygen. Cemex requests that the requirement to correct VOC concentration data to seven percent oxygen be deleted from the permit.

❖ ❖ ❖

This concludes our comments on a well written permit. We appreciate the effort that you and others put into the development of this permit. If there are any questions or comments regarding the comments we have provided herein, please do not hesitate to contact me at 352-377-5822 or jkoogler@kooglerassociates.com.

Very truly yours,

KOOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.
Florida P.E. Registration No. 12925

JBK/lt

cc: Trina Vielhauer
Al Linero
Leslie White, Esq., Cemex
Dan Merz, Cemex
Lillian Deprimo, Cemex
Jeet Gill, Cemex
Mike Gonzales, Cemex
Charlie Walz, Cemex
Segundo Fernandez
Tim Atkinson

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

August 3, 2007

Electronically Sent – Received Receipt Requested

michaelanthony.gonzales@cemexusa.com
Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Re: DEP File 0530010-033-AC
Extension of the Expiration Date of Permit 0530010-022-AC
CEMEX Brooksville Plant

Dear Mr. Gonzales:

The Department reviewed Koogler & Associates letter dated June 27, 2007 in your behalf for an extension of the expiration date of the referenced air construction permit for the construction of a tire feed system for Kiln No. 2; and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel in Kiln No. 2 at CEMEX Cement's Brooksville Portland cement plant. The Department evaluated your request and agrees to modify the expiration date as requested.

For a construction permit, an extension shall be granted if the applicant can demonstrate that, upon completion, the extended permit will comply with the standards and conditions required by the applicable regulations. [Rule 62-4.080(3), Florida Administrative Code (F.A.C.)]

The expiration date is hereby extended from September 30, 2007 to September 30, 2008 to allow sufficient time to complete the trial burn and compliance testing.

A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes (F.S.).

The Department's proposed agency action shall become final unless a timely petition for an administrative determination (hearing) is filed under sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within

fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the allege facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C..

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this permit modification. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting modification (order) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

for Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/th

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Permit Modification and all copies were sent electronically (with Received Receipt) before the close of business on **August 3, 2007** to the persons listed below:

Michael A. Gonzales, CEMEX: michaelanthony.gonzales@cemexusa.com
Charles Walz, CEMEX: charles.walz@cemexusa.com
Amarjits Gill, CEMEX: amarjits.gill@cemexusa.com
Mara Nasca, DEP SWD: mara.nasca@dep.state.fl.us
John Koogler, P.E. K&A: jkoogler@kooglerassociates.com
Fawn Bergen, P.E., K&A: fbergen@kooglerassociates.com
Segundo J. Fernandez, Esq., OHF&C: sfernandez@ohfc.com
Jim Little, EPA Region 4: Little.James@epamail.epa.gov
Kathy Forney, EPA Region 4: Forney.Kathleen@epamail.epa.gov

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.

(Clerk) 8/3/07 (Date)

Harvey, Mary

From: Harvey, Mary

Sent: Friday, August 03, 2007 10:53 AM

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

Cc: Heron, Teresa; Adams, Patty; Gibson, Victoria

Subject: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Attachments: 033EXTExpiration07.pdf

Tracking:

Recipient	Read
'michaelanthony.gonzales@cemexusa.com'	
'charles.walz@cemexusa.com'	
'amarjits.gill@cemexusa.com'	
Nasca, Mara	Read: 8/3/2007 10:58 AM
'jkoogler@kooglerassociates.com'	
'fbergen@kooglerassociates.com'	
'sfernandez@ohfc.com'	
'Little.James@epamail.epa.gov'	
'Forney.Kathleen@epamail.epa.gov'	
Heron, Teresa	
Adams, Patty	Read: 8/3/2007 3:09 PM
Gibson, Victoria	Read: 8/3/2007 10:55 AM

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Harvey, Mary

From: Heron, Teresa
To: Harvey, Mary
Sent: Tuesday, August 07, 2007 1:52 PM
Subject: Read: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Heron, Teresa; Adams, Patty; Gibson, Victoria
Subject:	Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC
Sent:	8/3/2007 10:53 AM

was read on 8/7/2007 1:52 PM.

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Friday, August 03, 2007 3:09 PM
Subject: Read: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Heron, Teresa; Adams, Patty; Gibson, Victoria
Subject:	Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC
Sent:	8/3/2007 10:53 AM

was read on 8/3/2007 3:09 PM.

Harvey, Mary

From: Forney.Kathleen@epamail.epa.gov
Sent: Friday, August 03, 2007 1:30 PM
To: Harvey, Mary
Cc: Little.James@epamail.epa.gov
Subject: Re: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Attachments: 033EXTExpiration07.pdf

033EXTExpiration07
.pdf (130 KB...

Thanks we did get this letter.

katy

Katy R. Forney
Air Permits Section
EPA - Region 4
61 Forsyth St., SW
Atlanta, GA 30024

Phone: 404-562-9130
Fax: 404-562-9019

"Harvey, Mary"
<Mary.Harvey@dep
.state.fl.us>

08/03/2007 10:53
AM

To
<michaelanthony.gonzales@cemexusa
.com>,
<charles.walz@cemexusa.com>,
<amarjits.gill@cemexusa.com>,
"Nasca, Mara"
<Mara.Nasca@dep.state.fl.us>,
<jkoogler@kooglerassociates.com>,
<fbergen@kooglerassociates.com>,
<sfernandez@ohfc.com>, James
Little/R4/USEPA/US@EPA, Kathleen
Forney/R4/USEPA/US@EPA

cc
"Heron, Teresa"
<Teresa.Heron@dep.state.fl.us>,
"Adams, Patty"
<Patty.Adams@dep.state.fl.us>,
"Gibson, Victoria"
<Victoria.Gibson@dep.state.fl.us>

Subject
Extension Letter - CEMEX Cement,
Inc. - Project #0530010-033-AC

Harvey, Mary

From: John Koogler [jkoogler@kooglerassociates.com]
Sent: Friday, August 03, 2007 11:50 AM
To: Harvey, Mary
Subject: RE: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Thank you

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

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Friday, August 03, 2007 10:53 AM
To: michaelanthony.gonzales@cemexusa.com; charles.walz@cemexusa.com; amarjits.gill@cemexusa.com; Nasca, Mara; jkoogler@kooglerassociates.com; fbergen@kooglerassociates.com; sfernandez@ohfc.com; Little.James@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov
Cc: Heron, Teresa; Adams, Patty; Gibson, Victoria
Subject: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Dear Sir/Madam:

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The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Harvey, Mary

From: Segundo J. Fernandez [sfernandez@ohfc.com]
To: Harvey, Mary
Sent: Friday, August 03, 2007 3:17 PM
Subject: Read: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Your message

To: sfernandez@ohfc.com
Subject:

was read on 8/3/2007 3:17 PM.

Harvey, Mary

From: charles.walz@cemex.com

Sent: Friday, August 03, 2007 10:59 AM

To: Harvey, Mary

Cc: amarjits.gill@cemexusa.com; charles.walz@cemexusa.com; fbergen@kooglerassociates.com; Forney.Kathleen@epamail.epa.gov; jkoogler@kooglerassociates.com; Little.James@epamail.epa.gov; Nasca, Mara; michaelanthony.gonzales@cemexusa.com; Adams, Patty; sfernandez@ohfc.com; Heron, Teresa; Gibson, Victoria

Subject: Re: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Thank you

Charles E Walz
Environmental Manager - Brooksville Plant - United States of America
Office : +1352(799)2011 , Fax: +1352(754)9836 , Mobile: +1352(279)1415
Address: 16301 Ponce de Leon Blvd Brooksville, Florida 34614
E-Mail: Charles.Walz@CEMEXUSA.com
www.cemexusa.com

Harvey, Mary

From: Nasca, Mara
To: Harvey, Mary
Sent: Friday, August 03, 2007 10:58 AM
Subject: Read: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Heron, Teresa; Adams, Patty; Gibson, Victoria
Subject:	Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC
Sent:	8/3/2007 10:53 AM

was read on 8/3/2007 10:58 AM.

Harvey, Mary

From: Charles E Walz [charles.walz@cemex.com]
Sent: Friday, August 03, 2007 10:57 AM
To: Harvey, Mary
Subject: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Return Receipt

Your document: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

was received by: charles.walz@cemex.com

at: 08/03/2007 10:57:03 EDT

Harvey, Mary

From: Gibson, Victoria
To: Harvey, Mary
Sent: Friday, August 03, 2007 10:55 AM
Subject: Read: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC

Your message

To: 'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc: Heron, Teresa; Adams, Patty; Gibson, Victoria
Subject: Extension Letter - CEMEX Cement, Inc. - Project #0530010-033-AC
Sent: 8/3/2007 10:53 AM

was read on 8/3/2007 10:55 AM.

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20
June 26, 2007

Ms. Trina Vielhauer
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

RE: CEMEX Cement, Inc.; Brooksville Cement Plant
Permit No. 0530010-022-AC Extension Request; Trial Period for Tire-Derived Fuel

Dear Trina:

CEMEX Cement, Inc. (CEMEX) is requesting a 1-year extension of Air Construction Permit No. 0530010-022-AC (Trial Period to Burn Tire-Derived Fuel in Kiln No. 2, expiration date September 30, 2007). CEMEX is still moving forward with this project, but would like additional time to complete the trial burn and compliance testing.

Please feel free to contact me at (352) 377-5822 or FBergen@kooglerassociates.com, or Mr. Charles Walz, CEMEX, at (352) 799-2011, if you have any questions regarding this issue.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

Fawn W. Bergen, PE
Project Engineer

FB

cc: S. Fernandez, OHF&C
J. Gill, CEMEX
M. Gonzales, CEMEX
A. Linero, FDEP – Tallahassee
M. Nasca, FDEP – SW District
C. Walz, CEMEX

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-05-11
July 27, 2006

Via Email and UPS Overnight

Ms. Cindy Mulkey
FDEP
Twin Towers Office Bldg.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Cemex Cement, Inc.
Brooksville Cement Plant
FDEP File 0530010-022-AC
Comments on Draft Permit

Dear Cindy:

Following are comments on the above captioned Draft Air Construction Permit issued to Cemex Cement, Inc. (Cemex). The permit authorizes Cemex to install a tire feed system on Kiln No. 2 at their Brooksville Cement Plant and to conduct temporary testing to establish site specific emission characteristics for Kiln No. 2 while burning Whole Tire Derived Fuel. The draft permit was issued on July 14, 2006. These comments are provided for the Department's review within the 14 day comment period established by Rule.

The following comments are referenced by Permit Condition number and/or page number of the draft permit.

Cover Page – expiration date.

Comment: The expiration date shown in the draft permit is May 1, 2007. Cemex estimates that it will require approximately seven months to get funding for the project, order the equipment for the tire feed system and install the equipment on Kiln No. 2. Beyond that, there should be an allowance of approximately a month for equipment shake down; approximately two months for CEMs certification, baseline emission testing and the development of baseline emission data; approximately three months for the trial burn period (see following comment) and two months as a contingency. This places the time of completion of the test period around November 1, 2007. For purposes of permit expiration, we are requesting a permit expiration date of December 31, 2007.

Section IV.A, Condition No. 4 (page 8 of 11)

Comment: Condition No. 4 specifies that the tire derived fuel test period shall end no later than March 1, 2007. In view of the schedule outlined in the preceding comment, we are requesting that this condition be amended to state that the test period shall end no later than December 31, 2007.

Also in this condition, and in Condition No. 1 of this same section, the permit states that the trial burn period for Whole Tire Derived Fuel shall be 60 consecutive calendar days in duration. We are requesting that Cemex be authorized to burn Whole Tire Derived Fuel in Kiln No. 2 for 90 operating days.

The 90 operating day trial burn period will give Cemex the time to balance the kiln while firing Whole Tire Derived Fuel and to develop a representative record of emission data. Furthermore, by defining the trial burn period in terms of operating days, Cemex will have the flexibility to work around unscheduled kiln outages.

Section III, Condition No. 2 (page 6 of 11)

Comment: This condition requires that the CO and NOx CEMS data be reported as one-hour averages in the units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd corrected to 15 percent oxygen. Cemex has no concern regarding the reporting of emissions in the units of pounds per ton of kiln feed, pounds per ton of clinker, and pounds per hour. And, the company has no concern with reporting the concentrations of CO and NOx (ppmvd) but sees no reason for correcting the concentration data to 15 percent oxygen. There are no permit conditions, regulatory standards or Department rules that require such a correction. Cemex, therefore, requests that the requirement to correct the CO and NOx concentration data to 15 percent oxygen be deleted from the permit.

Section IV.A., Condition No. 9 (page 9 of 11)

Comment: This condition establishes requirements for the baseline emission tests and includes the note that these emission tests can be used to satisfy the annual compliance testing requirement of the facility Title V Air Operating Permit. The baseline emission

testing is for CO, NOx, VOC, PM/PM10, visible emissions and D/F (the latter with the raw mill operating and with the raw mill off).

Cemex has the annual compliance testing for Kiln No. 2 (and Kiln No. 1) scheduled for the week of September 11, 2006. This compliance testing will include all the emission testing required by Condition No. 9, except for the D/F testing. Cemex would like the option of using the scheduled September 2006 compliance test data as the baseline data for Kiln No. 2. Regarding the baseline D/F testing, Cemex is planning D/F testing on Kiln No. 2 with the raw mill not operating later in 2006 and conducted D/F testing on Kiln No. 2 to reset the 30-month clock for tests with the raw mill operating in January 2006. Cemex would like the option of using these two D/F emission tests as baseline tests for the purposes of this permit condition.

Section IV.A., Condition No. 11 (page 10 or 11)

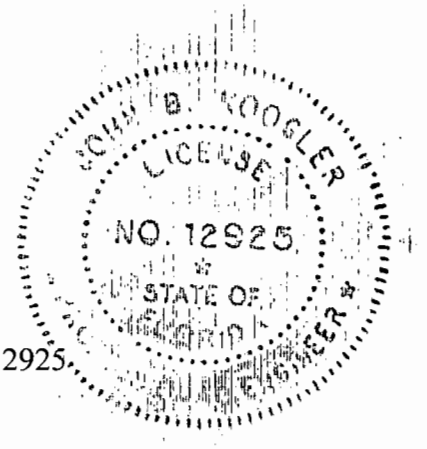
Comment: This condition requires that VOC emission data be expressed in several units including concentration (ppmvd) corrected to seven percent oxygen. There is no permit condition, regulatory requirement or Department rule that requires correcting VOC concentration data to seven percent oxygen. Cemex requests that the requirement to correct VOC concentration data to seven percent oxygen be deleted from the permit.

❖ ❖ ❖

This concludes our comments on a well written permit. We appreciate the effort that you and others put into the development of this permit. If there are any questions or comments regarding the comments we have provided herein, please do not hesitate to contact me at 352-377-5822 or jkoogler@kooglerassociates.com.

Very truly yours,

KOOGLER & ASSOCIATES



John B. Koogler, Ph.D., P.E.
Florida P.E. Registration No. 12925

JBK/lt

cc: Trina Vielhauer
Al Linero
Leslie White, Esq., Cemex
Dan Merz, Cemex
Lillian Deprimo, Cemex
Jeet Gill, Cemex
Mike Gonzales, Cemex
Charlie Walz, Cemex
Segundo Fernandez
Tim Atkinson

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-05-11
June 27, 2006

Via Email and USPS

Ms. Trina Vielhauer
FDEP-Division of Air Resources Mgmt.
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: ***Cemex, Inc.***
Brooksville Cement Plant
FDEP File No. 0530010-022-AC
Letter Amendment to Permit Application

Dear Trina:

This letter supersedes my letter of May 1, 2006 addressed to you and Al Linero and confirms information regarding the above-captioned Air Construction Permit file that we discussed during our meeting with you and your staff in your office on June 19, 2006. The above-captioned file addresses a trial period that Cemex had requested to evaluate the efficacy of burning petroleum coke (pet coke) in Kiln No. 1 and Kiln No. 2 at their Brooksville Cement Plant and also the efficacy of burning Tire Derived Fuel as a fuel supplement in Kiln No. 2. The use of Tire Derived Fuel is already permitted for Kiln No. 1.

During our meeting, Cemex explained that based on information developed at other plants, they would be unable to effectively burn pet coke at the Brooksville Cement Plant with the existing kiln burners and coal mills. Because of this finding, Cemex is requesting by this letter, that the use of pet coke in the trial addressed in the above-captioned Air Construction Permit application be withdrawn. Cemex is requesting, however, that the Department continue the processing of the above-captioned application for the trial period to evaluate use of Whole Tire Derived Fuel as a fuel supplement in Kiln No. 2.

The request to withdraw the use of pet coke from the above-captioned application does not affect the information contained in the original application (dated December 12, 2005) related to the use of Whole Tire Derived Fuel nor does it affect the information related to the use of Whole Tire Derived Fuel contained in our response to a Request for Additional Information (RAI) dated April 14, 2006.

Regarding matters related to the above-captioned permit application are matters addressed in an Air Construction permit application submitted to the Department on October 14, 2005 and assigned FDEP File No. 0530010-018-AC/PSD-FL-362. This application included the following projects:

(1) The installation of SNCR nozzles in the Kiln No. 1 and Kiln No. 2 systems,

(2) The replacement of kiln burners in Kiln No. 1 and Kiln No. 2,

(3) The use of pet coke on a continuing basis in Kiln No. 1 and Kiln No. 2, and

(4) The use of Whole Tire Derived Fuel on a continuing basis in Kiln No. 2.

Based on discussions between the Department and Cemex subsequent to the submittal of this application, Cemex submitted the Air Construction Permit application assigned File No. 0530010-022-AC. This application requested a trial period for the burning of pet coke and tire derived fuel. The purpose of the trial period is to generate data that can be used to support the projects requested in Application 0530010-018-AC. While not the immediate subject of this letter, the request to burn pet coke on a continuing basis will also be withdrawn from Application 0530010-018-AC and submitted at a later date in an entirely new Air Construction Permit Application.

Regarding the two Air Construction Permit Applications addressed herein, Cemex requests and/or understands the following:

- The application in File 0530010-022-AC, requesting authorization to use Whole Tire Derived Fuel on a trial basis in Kiln No. 2, will continue to be processed by

the Department. The request to use pet coke on a trial basis in Kiln No. 1 and Kiln No. 2 is withdrawn from this application by this letter.

- The permit issued following the completion of review of File 0530010-022-AC will recognize the installation and use of the SNCR nozzles in Kiln No. 1 and Kiln No. 2 and the installation and use of the kiln burners in Kiln No. 1 and Kiln No. 2. This recognization will eventually be superseded by conditions of the permit issued under File 0530010-018-AC.

- The processing of Application 0530010-018-AC will be placed on hold until data generated under Permit 0530010-022-AC have been generated and submitted to the Department. These data may require amendments to the application in File 0530010-018-AC; possibly subjecting other pollutants to a PSD Review or conversely, eliminating the necessity of a PSD Review entirely. When finally processed, the permit issued under this file will authorize the use on a continuing basis of the SNCR nozzles on Kiln No. 1 and Kiln No. 2, the kiln burners on Kiln No. 1 and Kiln No. 2 and Whole Tire Derived Fuel as a supplemental fuel in Kiln No. 2. The permit will also address other incidental items included in the original application or items that may have surfaced during the review of the application.

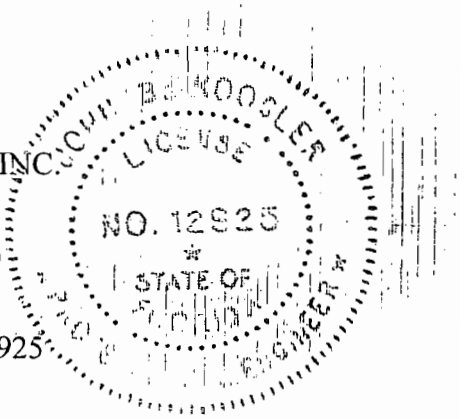
- There is a RAI from the Department related to File 0530010-018-AC dated March 31, 2006 that is outstanding. While this RAI does not specifically impact the primary request of this letter, a response will be prepared and submitted to the Department in a timely manner.

We appreciate the time that you and your staff have expended on the projects addressed herein and I hope that the information that I've provided and the understandings that I've expressed are consistent with the requests/understandings of the

Department. If there are any inconsistencies between what I've represented and the intentions of the Department or if there are questions regarding factual information I've provided, please contact me at 352-377-5822 or jkoogler@kooglerassociates.com.

Very truly yours,

KOOGLER & ASSOCIATES, INC.



John B. Koogler, Ph.D., P.E.
State of Florida License No. 12925

JBK/lt

cc: Ms. Cindy Mulkey
Mr. Al Linero
Mr. Jeet Gill
Mr. Mike Gonzales
Mr. Charlie Walz

Cindy M.

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Trina Vielhauer
2. DARM/BAR
3.
4.
5.

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

✓ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

✓ FOR YOUR FILES

COMMENTS:

RE: CEMEX
Consent Order
Submittal

FROM: Mara Nasca DATE: 7/18/06 PHONE: _____

DEP 15-026 (12/93)

DARM/BAR copy

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-06-02
July 13, 2006

RECEIVED
JUL 21 2006
BUREAU OF AIR REGULATION

Via UPS Ground

Dept. of Environmental Protection
JUL 14 2006
Southwest District

Ms. Mara G. Nasca, Administrator of Air Programs
FDEP SW District Office
13051 N Telecom Pkwy
Temple Terrace, FL 33637-0926

RE: Cemex Cement, Inc.
OGC File No. 05-2192

Dear Ms. Nasca:

In accordance with requirements of the Consent Order issued pursuant to the above captioned OGC file, Cemex Cement, Inc. (Cemex) is providing herewith four (4) copies of the information required by Paragraph 22 of the Consent Order. The information herein relates to the No. 1 and No. 2 Kiln/Raw Mill systems at the Cemex Brooksville, Florida Cement Plant.

In summary, the information provided herein documents the procedures Cemex employs to cool the preheater gases bypassing the No. 1 and No. 2 Raw Mills. The information includes procedures followed by Cemex personnel for positioning dampers in the ductwork surrounding the No. 1 and No. 2 Raw Mills, documentation of the parameters monitored during the operations of the No. 1 and No. 2 Kiln Systems and drawings, diagrams, and photographs showing the ductwork and dampers associated with the No. 1 and No. 2 Raw Mills.

If there are questions regarding any of the information provided herein or if additional information is required, please do not hesitate to contact me at 352-377-5822 or jkoogler@kooglerassociates.com.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK/lt

Attachments

cc: Trina Vielhauer
Leslie White, Esq., Cemex
Dan Merz, Cemex
Lillian Deprimo, Cemex
Jeet Gill, Cemex
Mike Gonzales, Cemex
Charlie Walz, Cemex
Segundo Fernandez
Tim Atkinson

CEMEX

July 14, 2006

Via FedEx – Overnight Delivery

Dept. of Environmental Protection

JUL 17 2006

Southwest District

Ms. Mara G. Nasca, Administrator of Air Programs
FDEP SW District Office
13051 N Telecom Pkwy
Temple Terrace, FL 33637-0926

RE: Cemex Cement, Inc.
OGC File No. 05-2192

Dear Mara:

As discussed in our telephone conversation of this date, I am enclosing four (4) copies of the Responsible Official Certification supporting the submittal of documents made under cover of a July 13, 2006 letter to you from John B. Koogler.

If you have any questions or if additional information is required, please do not hesitate to contact me at 713-722-5962 or daniell.merz@cemexusa.com.

Very truly yours,

Daniel L. Merz
Vice President
Environmental Affairs

Enclosure(s)

United States Operations
840 Gessner, Suite 1400, Houston, Texas 77024. USA. Phone: (713) 650-6200

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official of Cemex Cement, Inc. I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in the documents submitted under cover a July 13, 2006 letter to Ms. Mara G. Nasca from John B. Koogler, in accordance with the Consent Order issued pursuant to OGC File No. 05-2192 are true, accurate, and complete.

Daniel L Merz
(Signature of Responsible Official)

July 14, 2006
(Date)

Name: Daniel L. Merz Title: Vice President, Environmental Affairs

INFORMATION REQUIRED BY PARAGRAPH 22 OF THE CONSENT ORDER IN OGC FILE NO. 05-2192

22.b. **Detailed information on cooling techniques used to minimize exhaust gas cooling time and residence time in the D/F formation zone.**

Response

CEMEX controls the formation of D/F using two fresh air dampers designated 323E and 323N on the No. 1 Kiln and two fresh air dampers designated as 2323A and 2323 for the No. 2 Kiln. These dampers draw ambient cooling air into the bypass ducts located in the respective raw mill buildings.

When a raw mill is shut down the control room operators will initiate the Control Operating Procedures (see Attachment A) that are posted in the Control Room. These procedures consist of a series of damper changes in each raw mill duct system that have been established to achieve the bypass cooling of the preheater gases thus preventing the formation of D/F. The two fresh air dampers, 323E (No. 1 Raw Mill) and 2323A (No. 2 Raw Mill), are totally closed when the raw mills are operating and 100 percent open when the raw mills are shut down. The two fresh air dampers, 323N (No. 1 Raw Mill) and 2323 (No. 2 Raw Mill), modulate to control the inlet temperatures into the main kiln raw mill baghouse on each side in the raw mill up and raw mill down operating modes.

Each baghouse inlet temperature has a controlling set point that is used to regulate the automatic damper actuators to open or close Dampers 323N and 2323 so that each temperature set point is automatically maintained. The damper positions of these four dampers are currently being recorded and archived.

To achieve bypass cooling on the No. 1 Raw Mill (Raw Mill DOWN), dampers 317, 318, 320, 321 and 322 must all be closed and damper 319 is fully open. On the No. 2 side (Raw Mill DOWN), dampers 2317, 2318, 2320, 2321 and 2322 are all closed and damper 2319 is fully opened.

22.b.(i) **Temperature readings from temperature probe locations currently located in the raw mill bypass ducts.**

Response

The only temperature probes located in the raw mill bypass ducts are the thermocouples located in the inlet ducting of both kiln/mill baghouses as required by the MACT regulations (See Attachment B). Each location contains two permanently mounted thermocouples. Only temperature readings from one of these thermocouples on each side is recorded and archived in a computer. The other thermocouple serves as a back up in case the other fails.

22.b.(ii) **Detailed engineering drawings of the ductwork and damper locations.**

Response

See Attachment B.

22.b.(iii) **Process flow diagrams.**

Response

Included in Attachment C are Process Flow Diagrams for the Raw Mill No. 1 up and down operating modes and similar Process Flow Diagrams for Raw Mill No. 2.

22.b.(iv) **Photographs of the current raw mill bypass exhaust gas cooling systems.**

Response

See Attachment D.

22.c.(i) **Detailed information on control room parameters, including damper positions and for adjustable dampers, tracking the size of damper opening(s).**

Response

Refer to Response 22.b. and Attachments A and C. The degree of opening (0-100 percent) for modulating dampers 323N (Raw Mill No. 1) and 2323 (Raw Mill No. 2) are recorded and archived in the Control Room. The other dampers are open/closed dampers and the positions of these dampers are indicated in the Control Room, but not recorded and archived.

22.c.(ii) **Records of air flows.**

Response

No air flow measurements are made in the bypass ducting of either raw mill.

22.c.(iii) **Records of temperature readings in the raw mill bypass ducts.**

Response

Refer to Response 22.b.(i). No temperature measurements are made in the ducting at either Raw Mill No. 1 or No. 2. The only temperatures monitored and archived are those at the inlets of the No. 1 and No. 2 Kiln/Raw Mill baghouses.

22.c.(iv) **Other similar data collected when transitioning to, and operating in, the "raw mill off" and "raw mill on" modes, and in the "SNCR off" and "SNCR on" modes.**

Response

The data recorded and archived, data indicated but not recorded and operating procedures related to the raw mills have been addressed in the preceding responses. These procedures are followed whether or not SNCR is employed. At the present time, SNCR is employed essentially 100 percent of the time on Kiln No. 1 and Kiln No. 2.

22.d. **Cemex's plan for monitoring and maintaining records of Control Room parameters.**

Response

Cemex proposes to continue with the procedures detailed in the preceding responses to assure that D/F emissions will not exceed applicable limits.

PROFESSIONAL ENGINEER CERTIFICATION

Professional Engineer Name: John B. Koogler, Ph.D., P.E.

Florida P.E. Registration No.: 12925

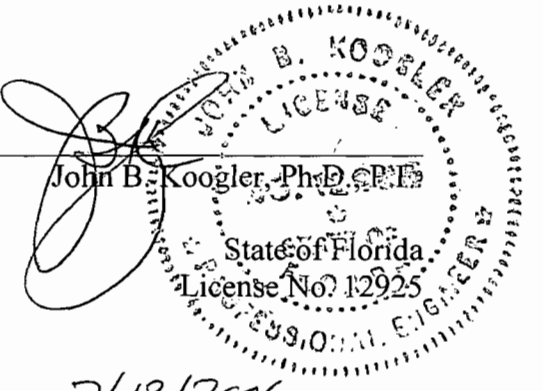
Professional Engineer Mailing Address: Koogler & Associates, Inc.
4014 NW 13th Street
Gainesville, FL 32609-1923

Professional Engineer Telephone No.: 352.377.5822

Professional Engineer Email Address: jkoogler@kooglerassociates.com

Professional Engineer Certification:

I, the undersigned, hereby certify that the information provided herein has been prepared by me, prepared under my supervision or thoroughly reviewed by me. I further certify, based on information and belief formed after reasonable inquiry, that the information and statements provided herein are true, accurate, and complete. I further certify that, to the best of my knowledge, the information provided in Attachment A includes the procedures routinely used by Cemex Brooksville, Florida Cement Plant operators when transitioning from one raw mill operating mode to another; that the data monitoring, recording and/or archiving described herein are procedures routinely used by Cemex Brooksville, Florida Cement Plant operators; and that the engineering drawings, process flow diagrams and photographs reasonably represent the ductwork and damper locations associated with Raw Mill No. 1 and Raw Mill No. 2 located at the Cemex Brooksville, Florida Cement Plant.



John B. Koogler, Ph.D., P.E.
State of Florida
License No. 12925

7/13/2006
Date

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

Attachment A
Control Operating Procedures

CEMEX Brooksville Cement Plant

Control Operating Procedure for Kiln #1 when the Raw Mill is operating and when it goes down.

The Bag House Inlet temperature limit when the Raw Mill is operating is now 250 deg F.

The maximum kiln feed rate with the raw mill running is 151 tph.

The Bag House Inlet temperature limit when the Raw Mill is not operating is now 367 deg F.

The maximum kiln feed rate with the raw mill down is 124 tph.

The following steps must be followed whenever the No. 1 Raw Mill goes down in order to control dioxin/furan emissions. The bag house inlet temperature must stay below 367 deg F at all times after the mill is shut down. The order of the following steps may change due to varying operating conditions

Open the 319 damper

Fully close the 317 damper.

Open 323E damper 100%.

Shut down the raw mill fan when the temperature allows it and close the 318 dampers.

Fully close the 322 damper.

Fully close the 321 damper.

The 323N fresh air damper will modulate as required to maintain the bag house inlet temperature at less than 368 deg F. The max kiln feed rate of 124 tph cannot be exceeded while the mill is down

Close the 320 damper to fully isolate the mill.

The max kiln feed rate of 124 cannot be exceeded while the mill is down.

Adjust the main bag house fan damper as required to draft the system.

CEMEX Brooksville Cement Plant

Control Operating Procedure for Kiln #2 when the Raw Mill is operating and when it goes down.

The Bag House Inlet temperature limit when the Raw Mill is operating is now 250 deg F.

The maximum kiln feed rate with the raw mill running is 148 tph

The Bag House Inlet temperature limit when the Raw Mill is not operating is now 395 deg F.

The maximum kiln feed rate with the raw mill down is 133 tph.

The following steps must be followed whenever the No. 2 Raw Mill goes down in order to control dioxin/furan emissions. The bag house inlet temperature must stay below 395 deg F at all times after the mill is shut down. The order of the following steps may change due to varying operating conditions.

Open the 2319 damper.

Fully close the 2317 damper.

Open the 2323A damper 100 %

Shut down the raw mill fan when the temperature allows it and close the 2318 dampers.

Fully close the 2322 damper.

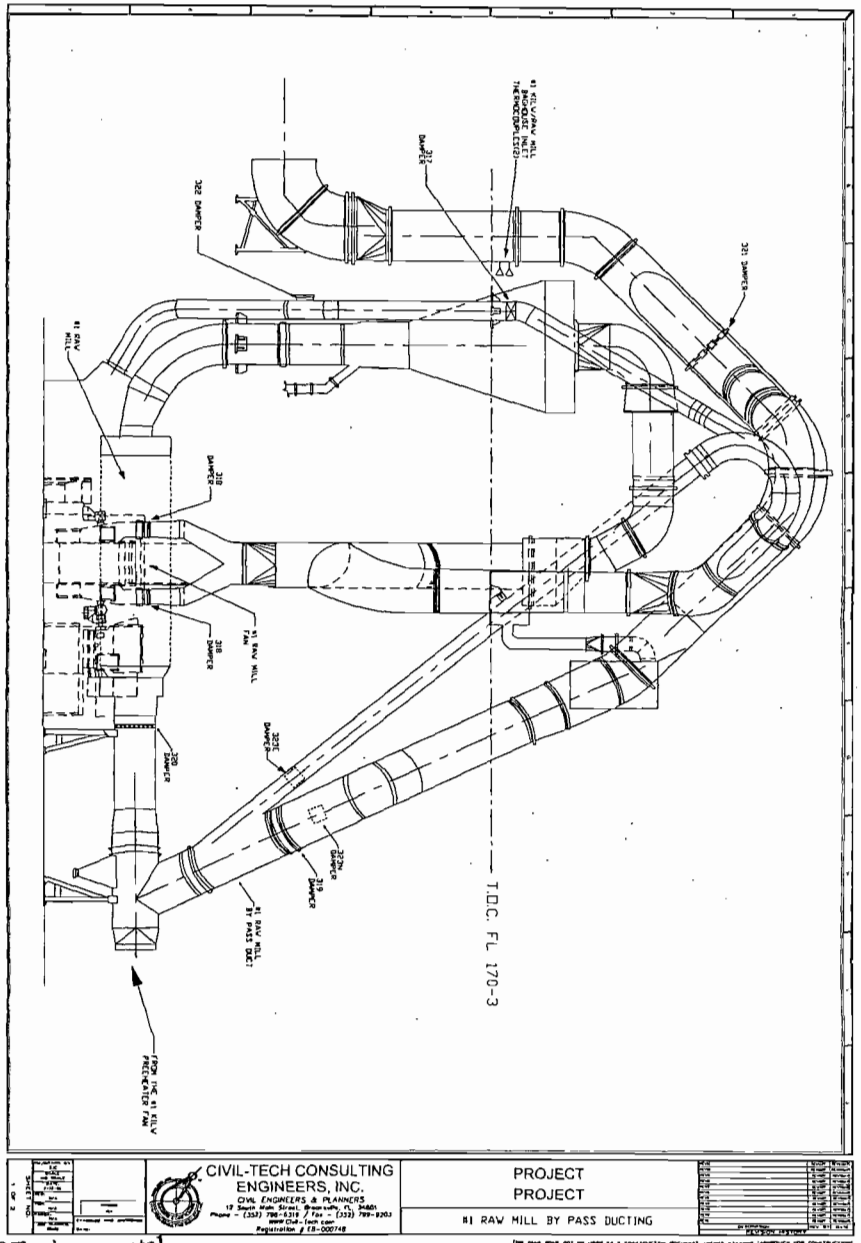
Fully close the 2321 damper.

The 2323 fresh air damper will modulate as required to maintain the bag house inlet temperature at less than 395 deg F. The max kiln feed rate of 133 tph cannot be exceeded while the mill is down.

Close the 2320 damper to fully isolate the mill.

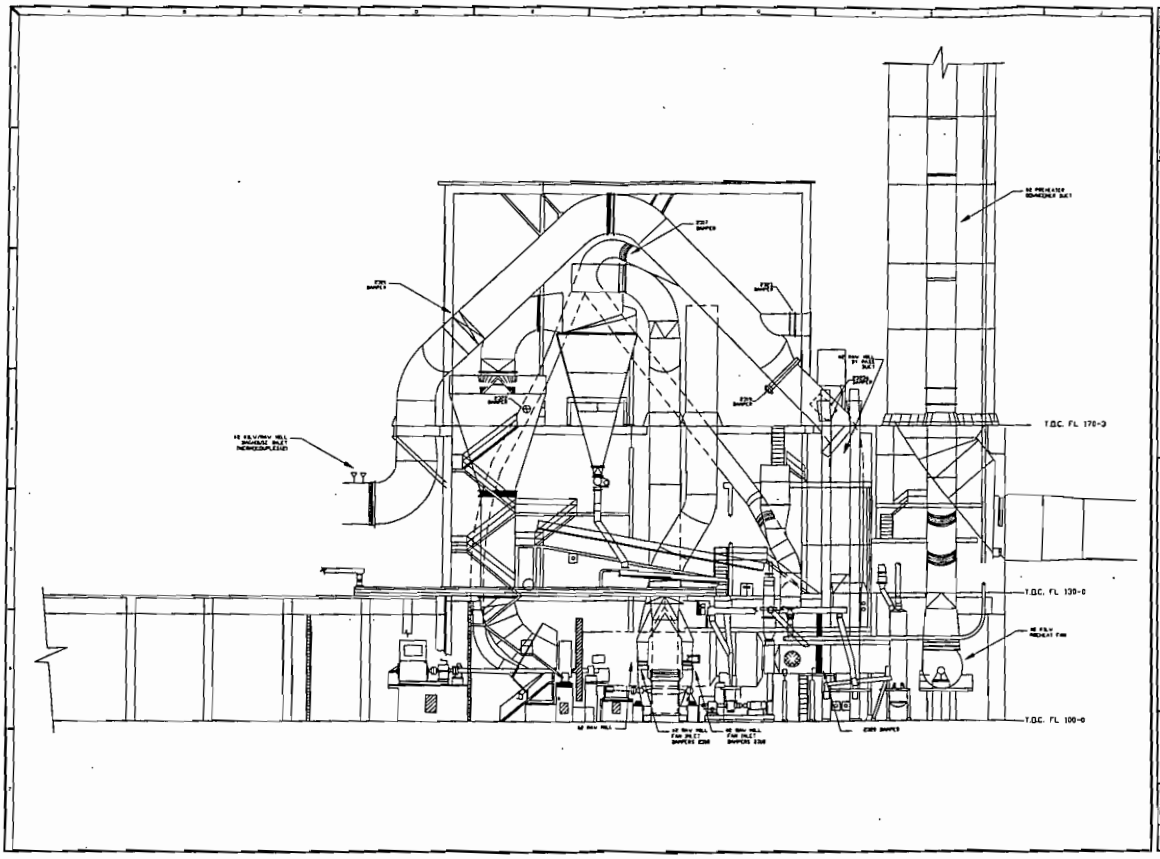
Adjust the main bag house fan damper as required to draft the system.

Attachment B
Engineering Drawings of Bypass Ductwork Showing Dampers



CIVIL-TECH CONSULTING ENGINEERS, INC.
CIVIL ENGINEERS & PLANNERS

PROJECT
PROJECT
#1 RAW MILL BY PASS DUCTING



PROJECT
PROJECT

#2 RAW MILL BY PASS DUCTING

CIVIL-TECH CONSULTING ENGINEERS, INC.

SHEET NO.
1 OF 2

Attachment C
Process Flow Diagrams

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

Figure 1

DAMPER CONFIGURATION AT RAW MILL NO. 1 SHOWING
DAMPER SETTINGS FOR RAW MILL UP SCENARIO
AND DIRECTION OF AIR FLOWS

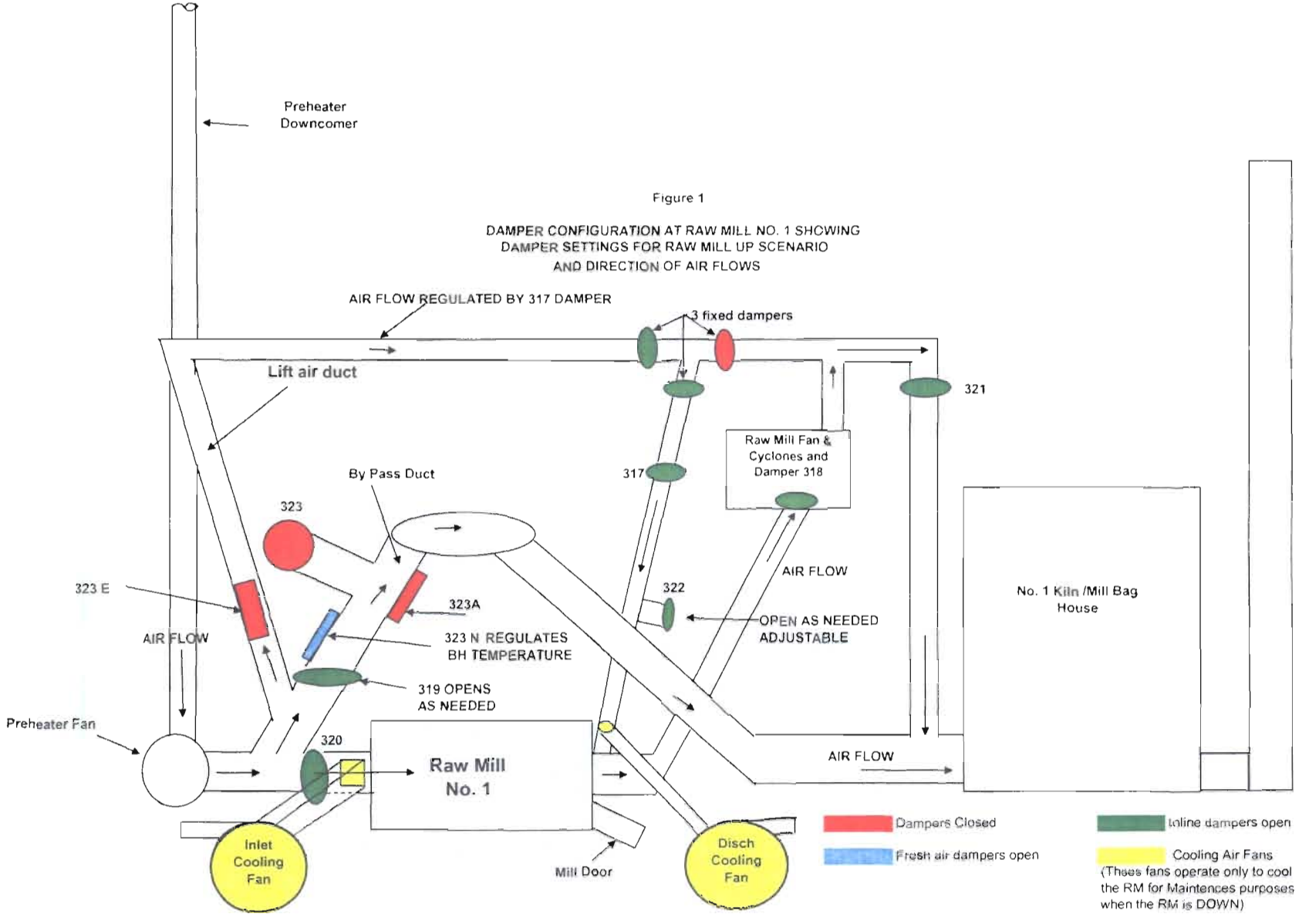


Figure 2

DAMPER CONFIGURATION AT RAW MILL NO. 1 SHOWING
DAMPER SETTINGS FOR RAW MILL DOWN SCENARIO
AND DIRECTION OF AIR FLOWS

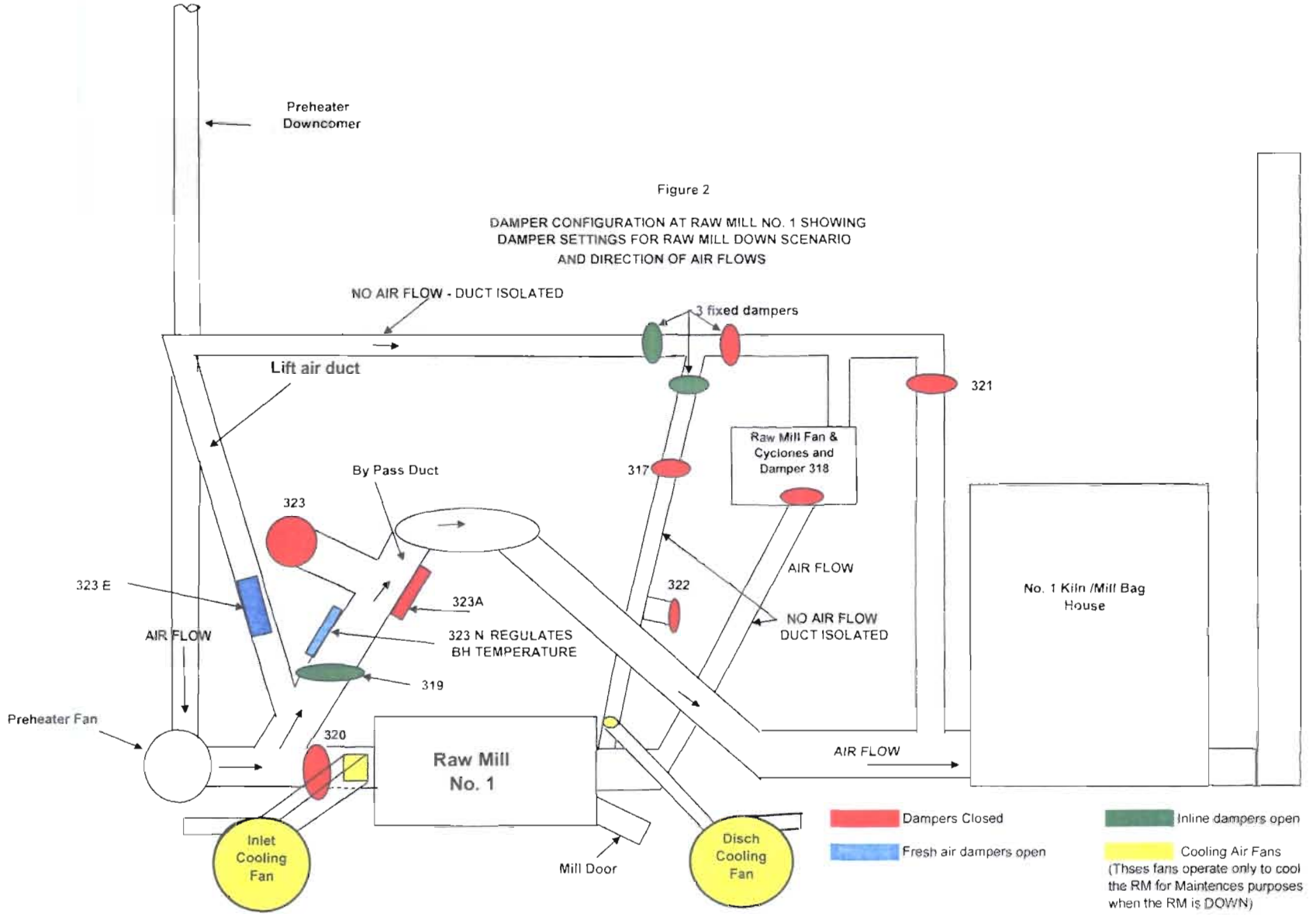


Figure 3

DAMPER CONFIGURATION AT RAW MILL NO. 2 SHOWING
DAMPER SETTINGS FOR RAW MILL UP SCENARIO
AND DIRECTION OF AIR FLOWS

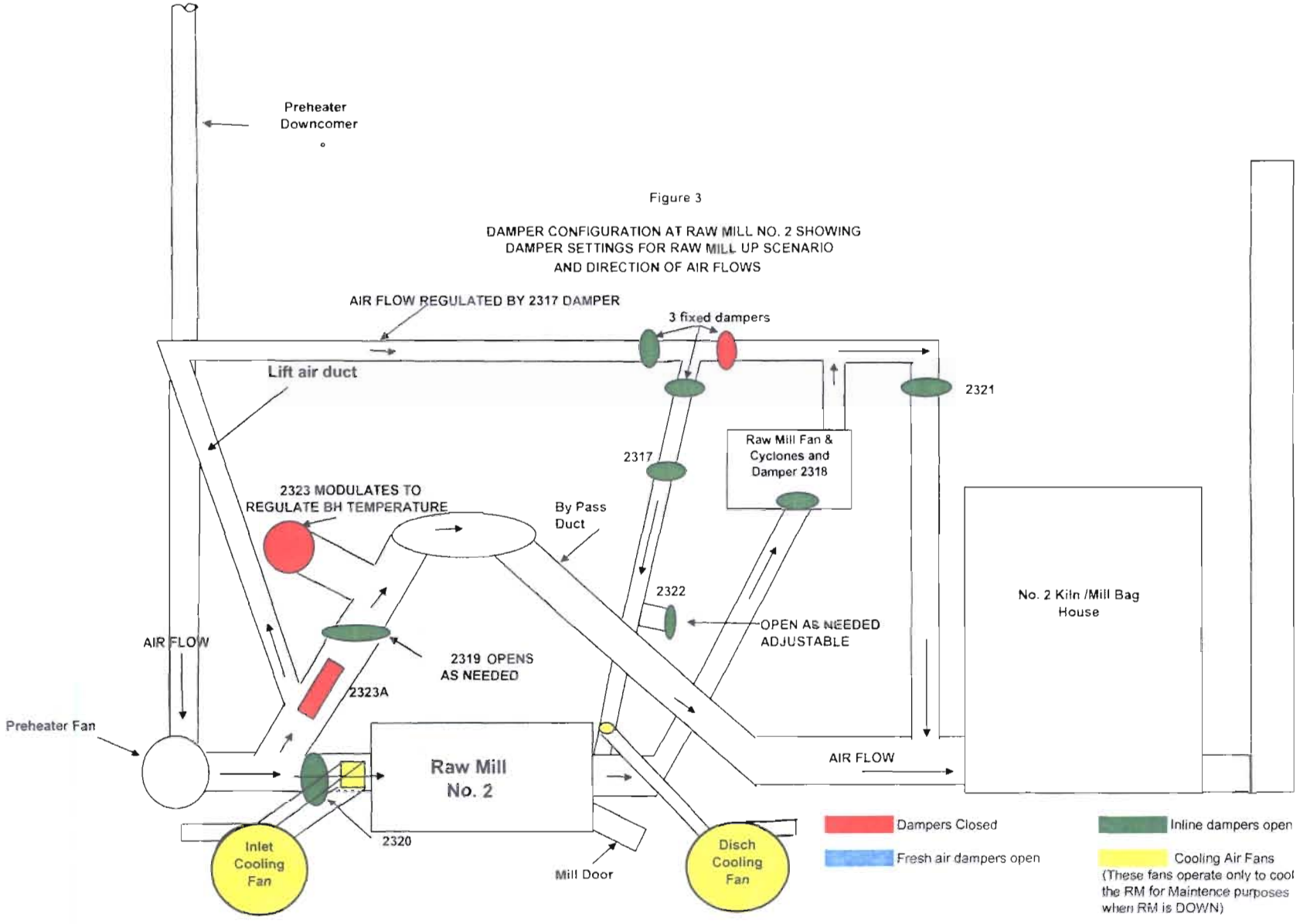
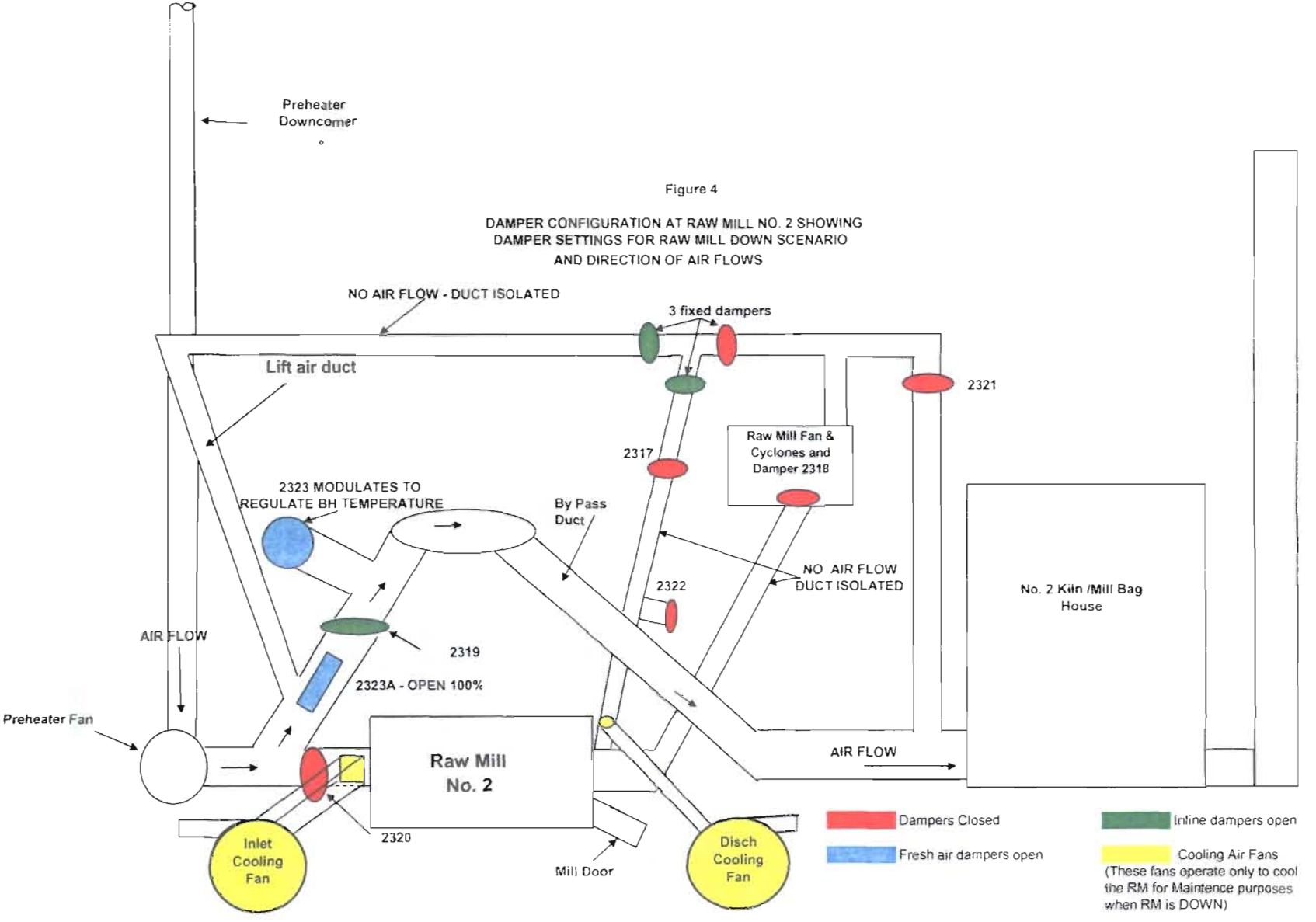


Figure 4

DAMPER CONFIGURATION AT RAW MILL NO. 2 SHOWING
DAMPER SETTINGS FOR RAW MILL DOWN SCENARIO
AND DIRECTION OF AIR FLOWS



Attachment D
Photographs of No. 1 and No. 2 Raw Mill Ducting

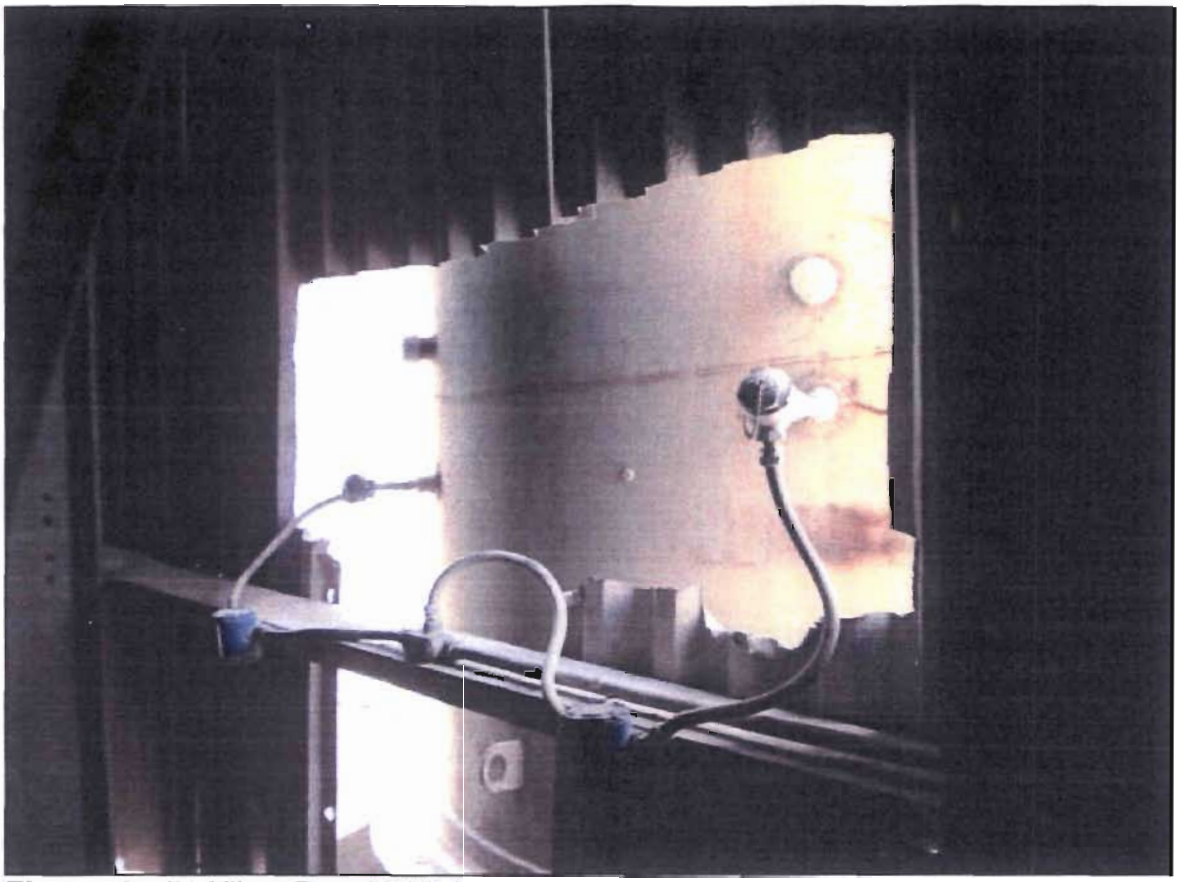


Figure 1: #1 Kiln—Raw Mill B H Inlet Thermocouples.

Figure 2: #1 Raw Mill by pass Ducting (1).

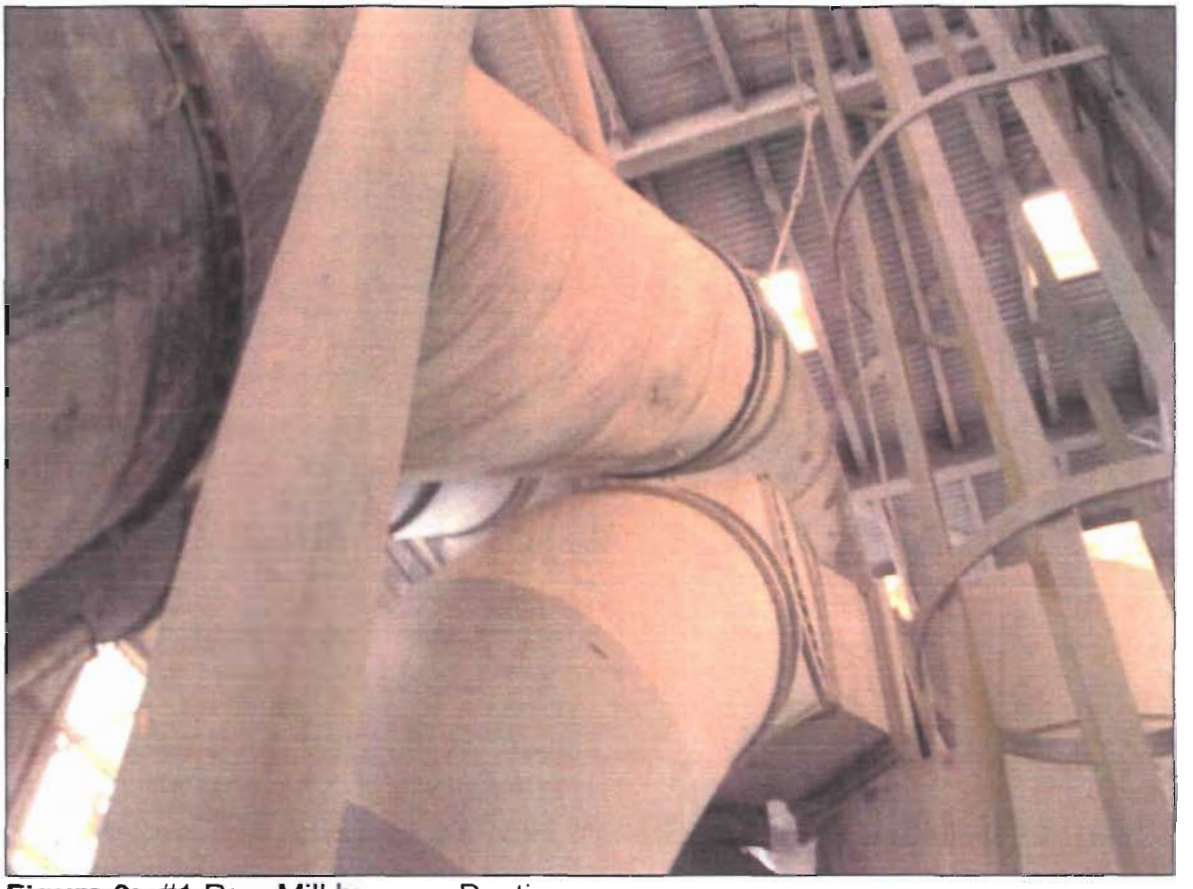


Figure 3: #1 Raw Mill by pass Ducting

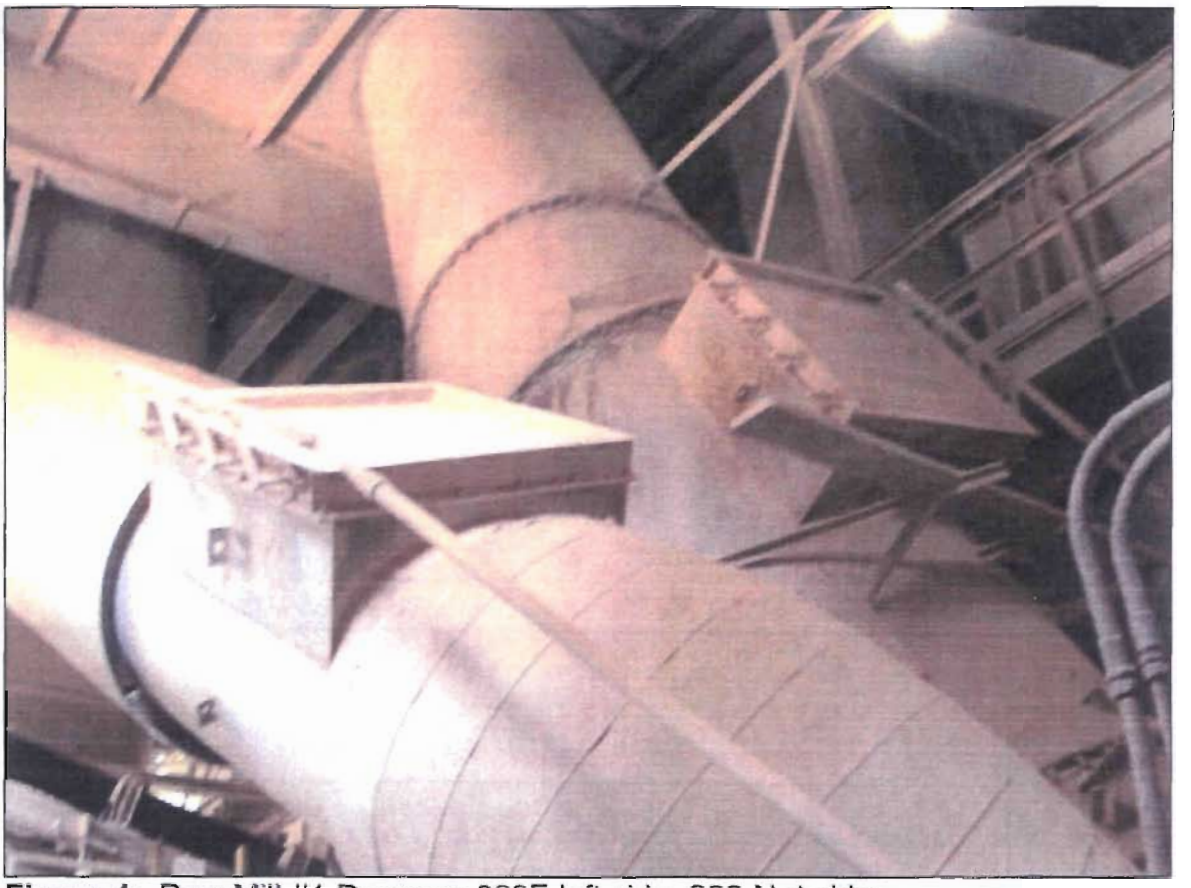


Figure 4: Raw Mill #1 Dampers 323E left side, 323 N rt side.

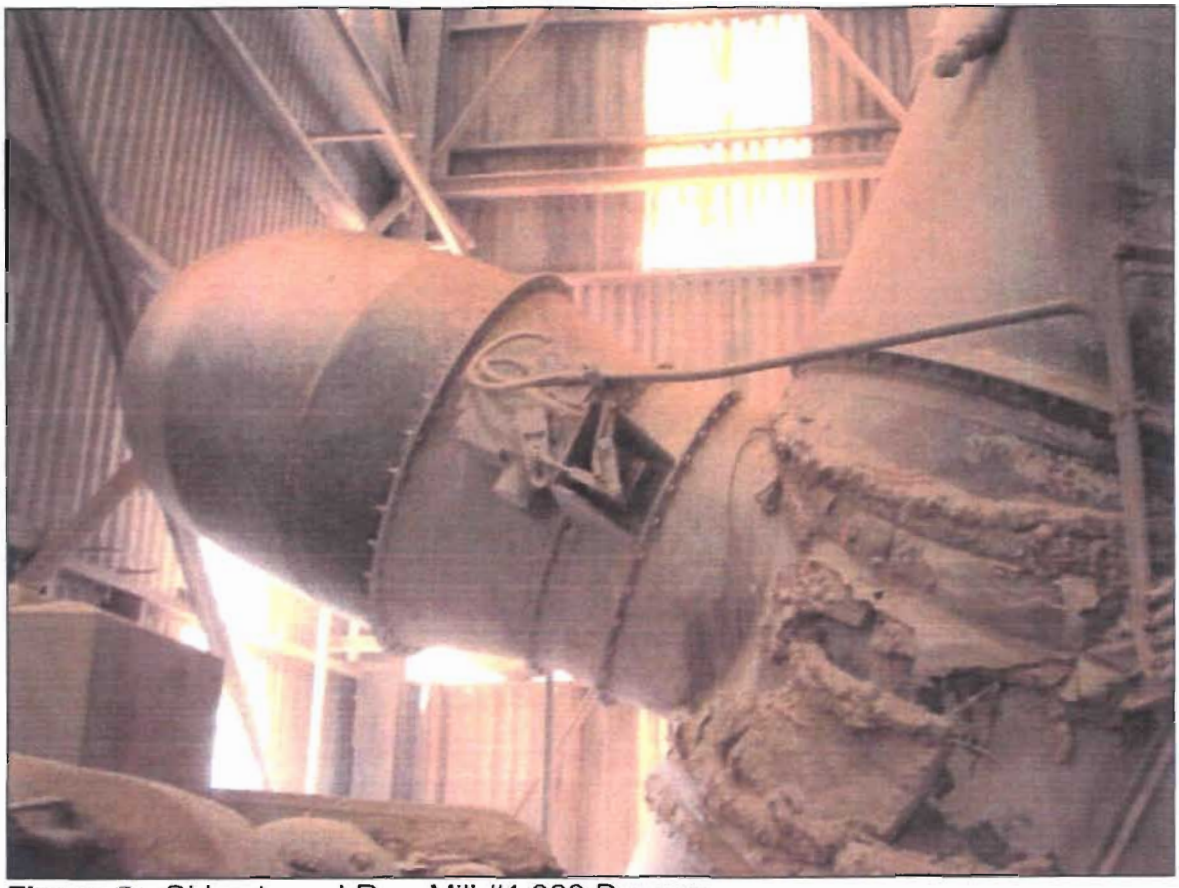


Figure 5: Old not used Raw Mill #1 323 Damper.

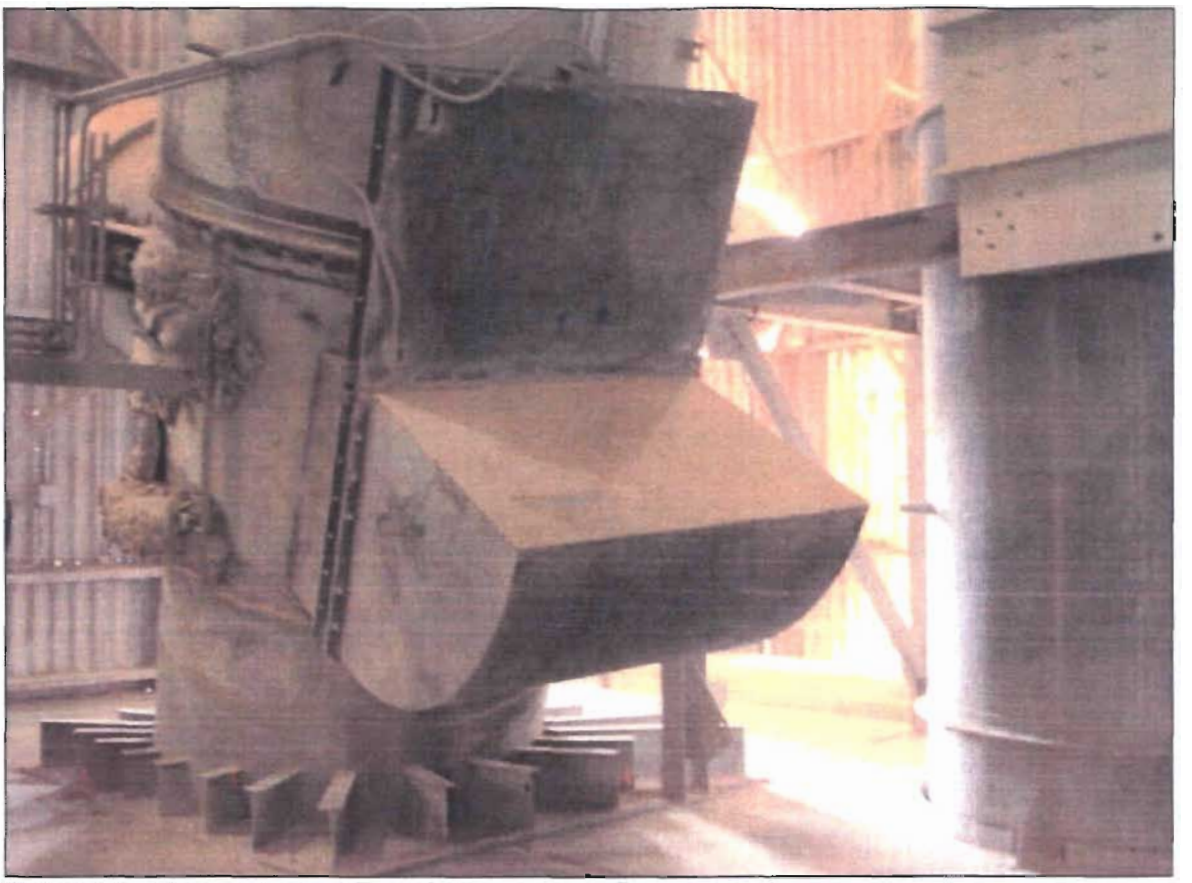


Figure 6: Old not used Raw Mill #1 323A Damper.

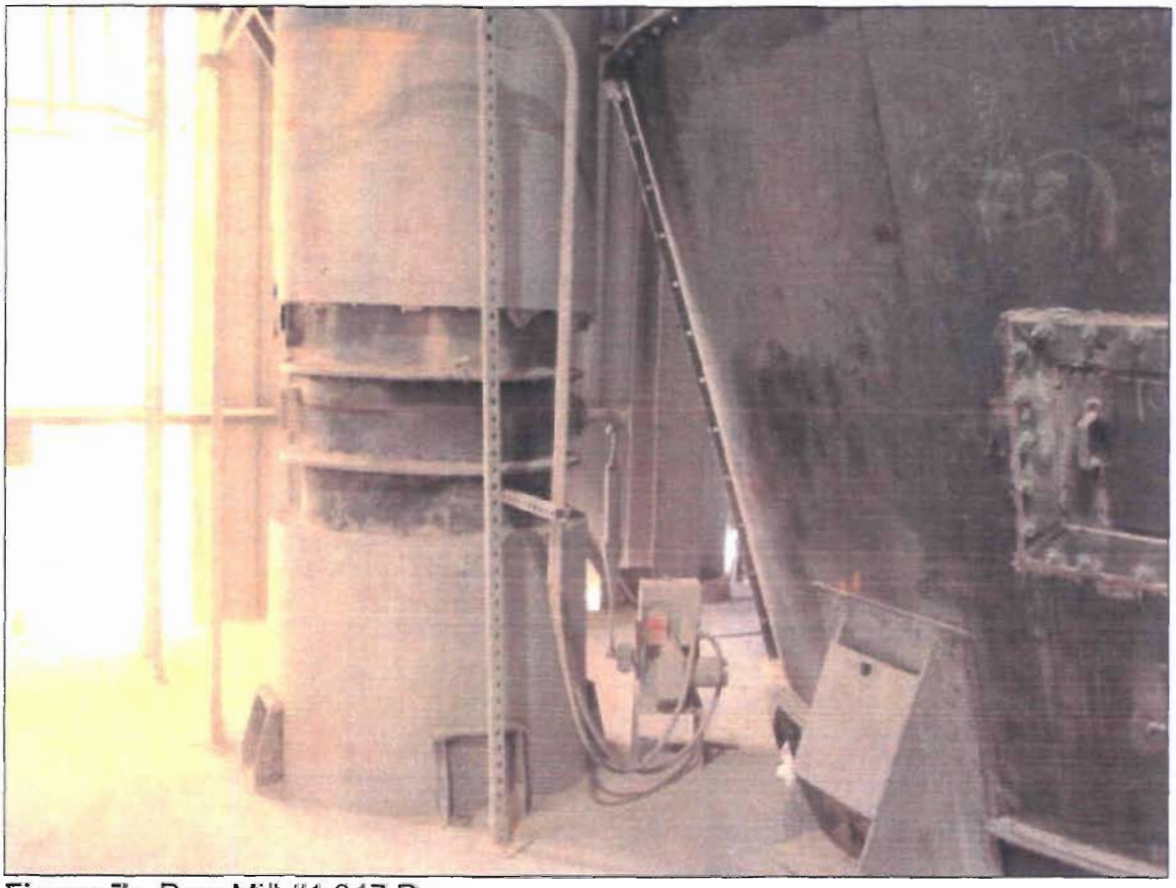


Figure 7: Raw Mill #1 317 Damper.

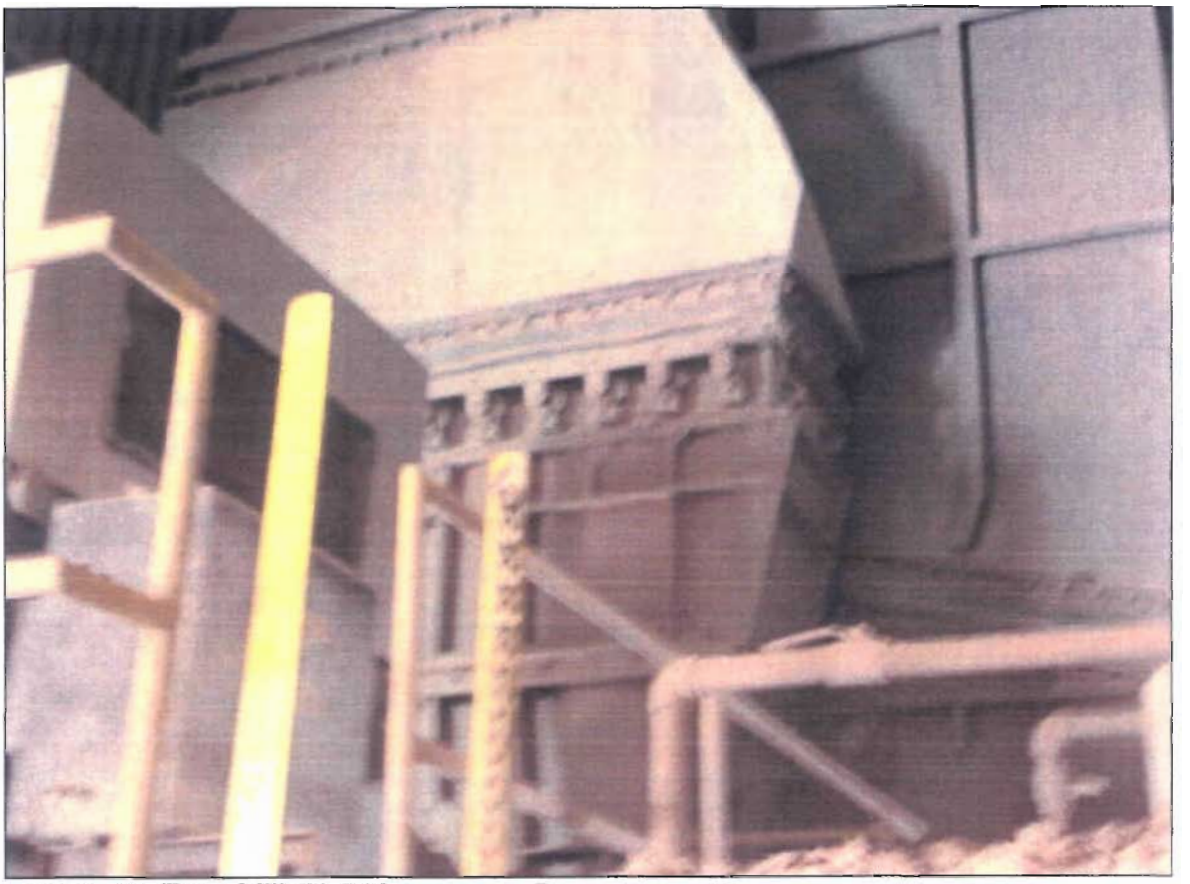


Figure 8: Raw Mill #1 318 Fan inlet Dampers.

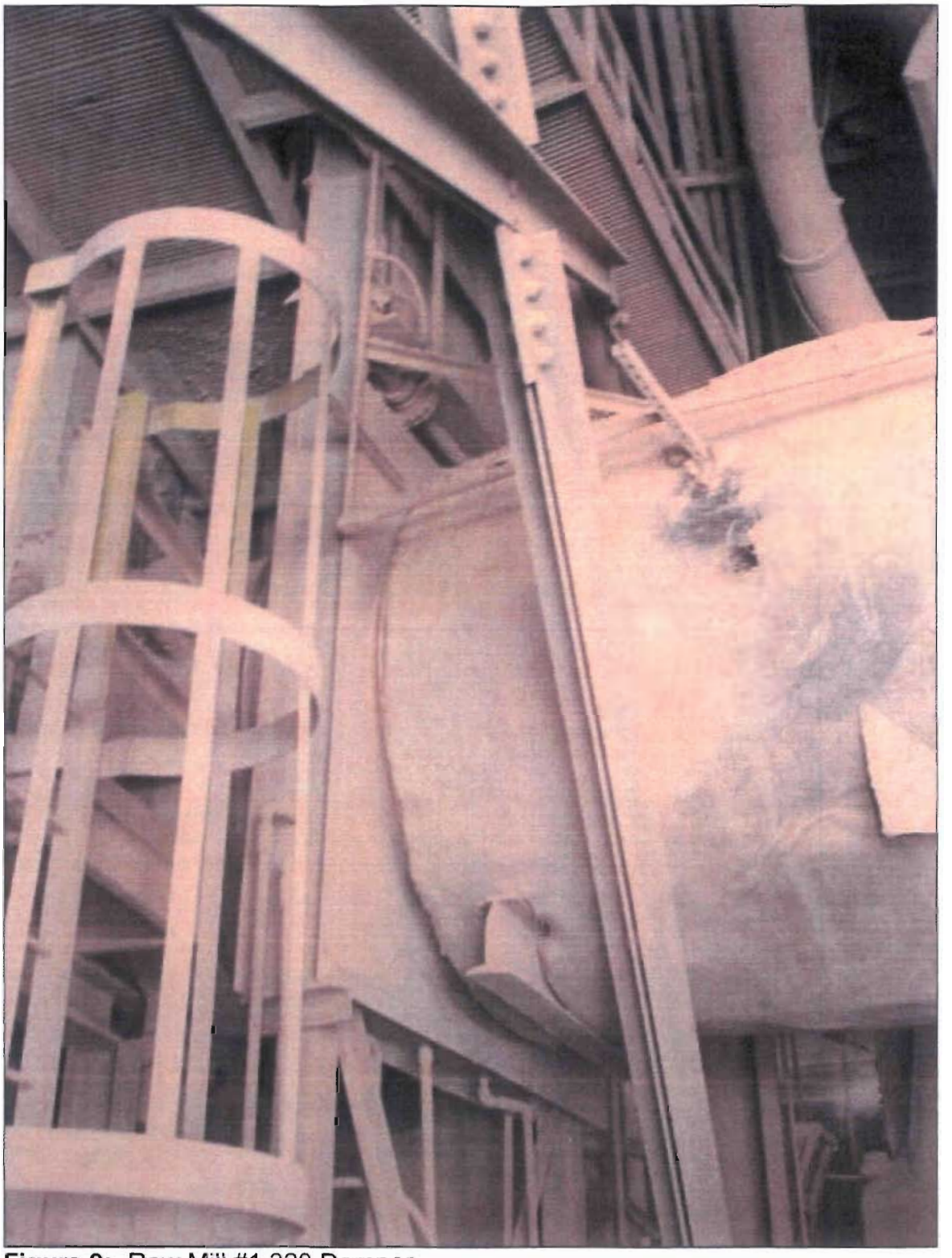


Figure 9: Raw Mill #1 320 Damper.

Figure 10: Raw Mill #1 321 Damper.

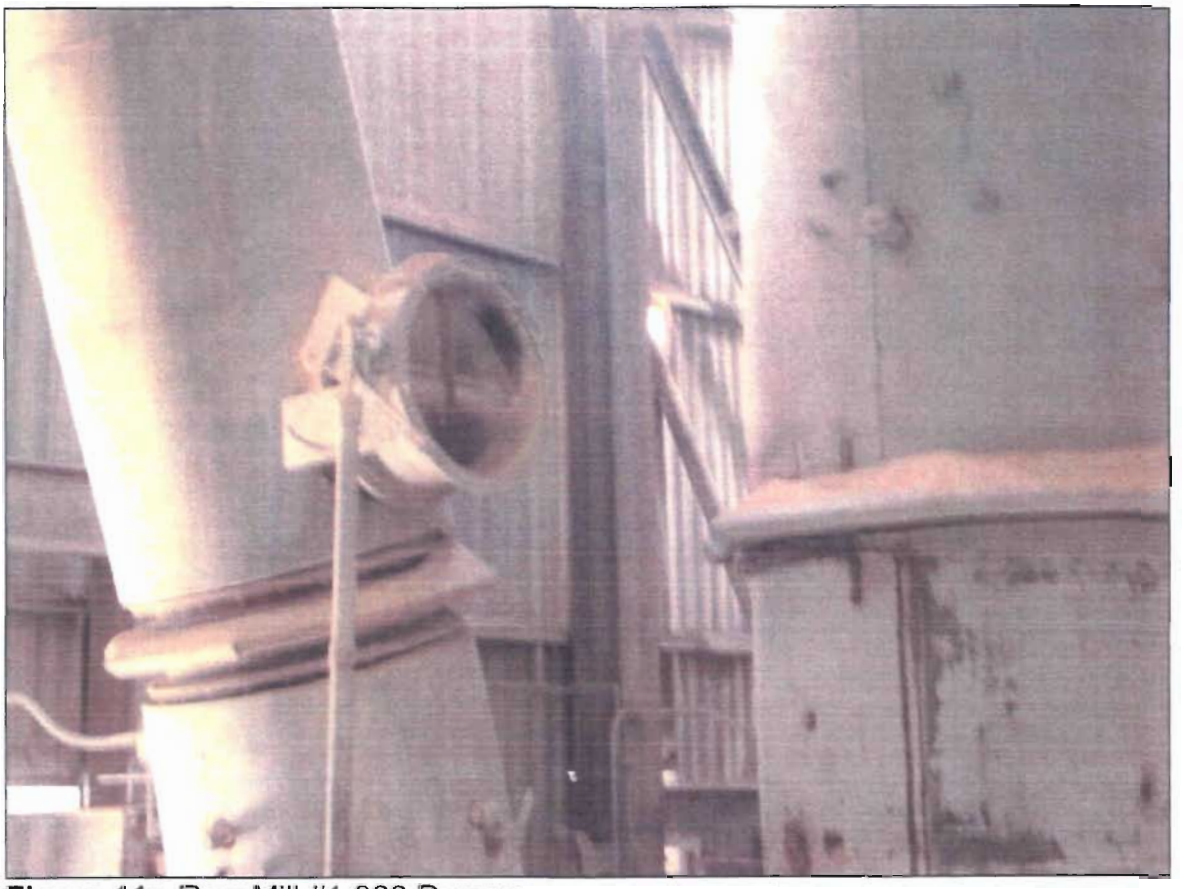


Figure 11: Raw Mill #1 322 Damper.

Figure 12: #2 Kiln—Raw Mill BH Inlet Thermocouples.

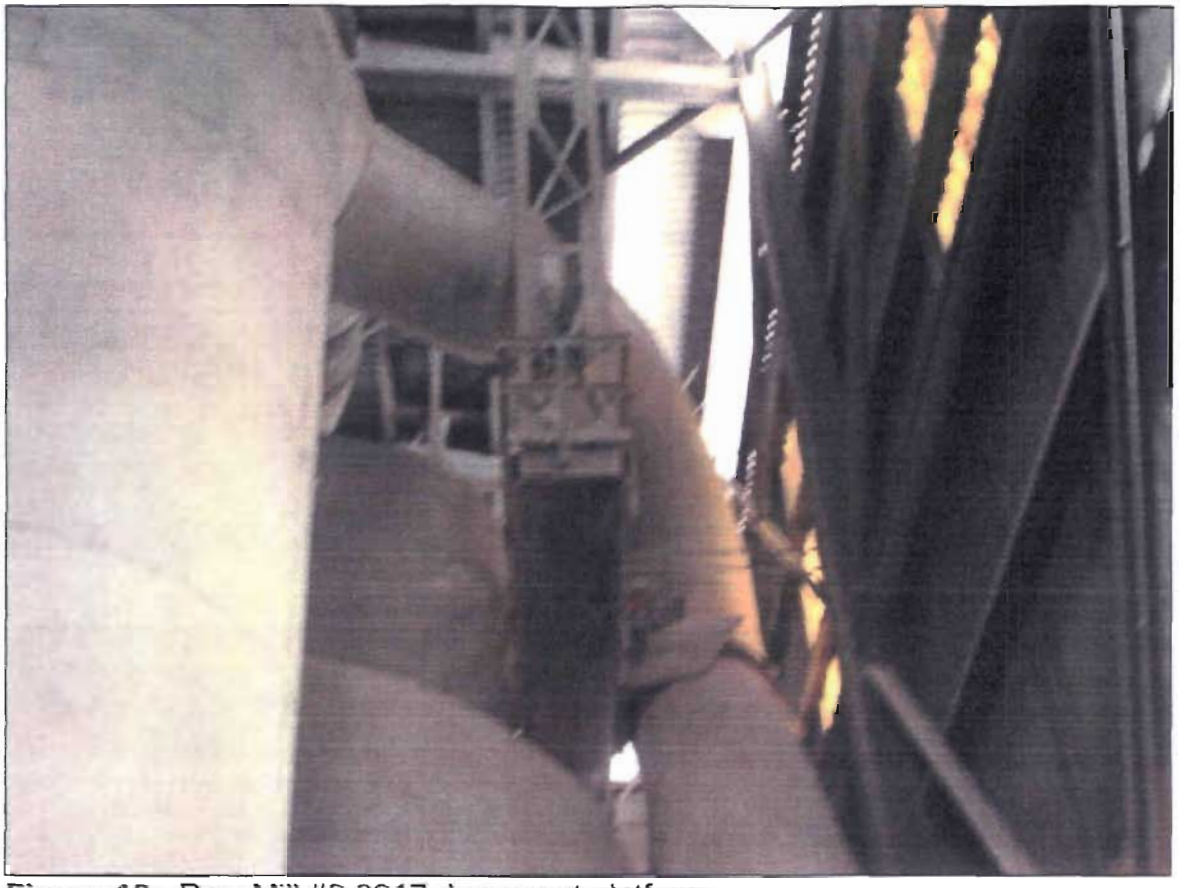


Figure 13: Raw Mill #2 2317 damper at platform.

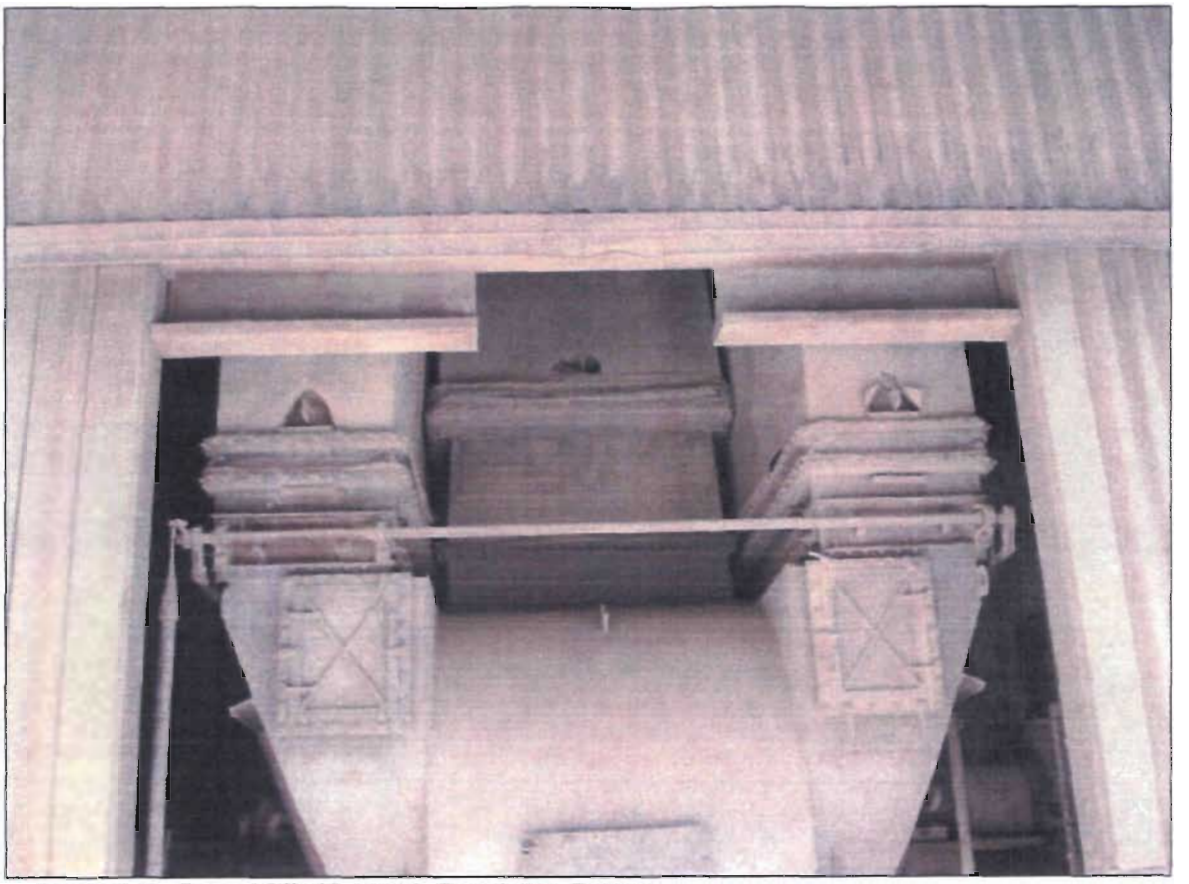


Figure 14: Raw Mill #2 2318 Fan inlet Dampers.

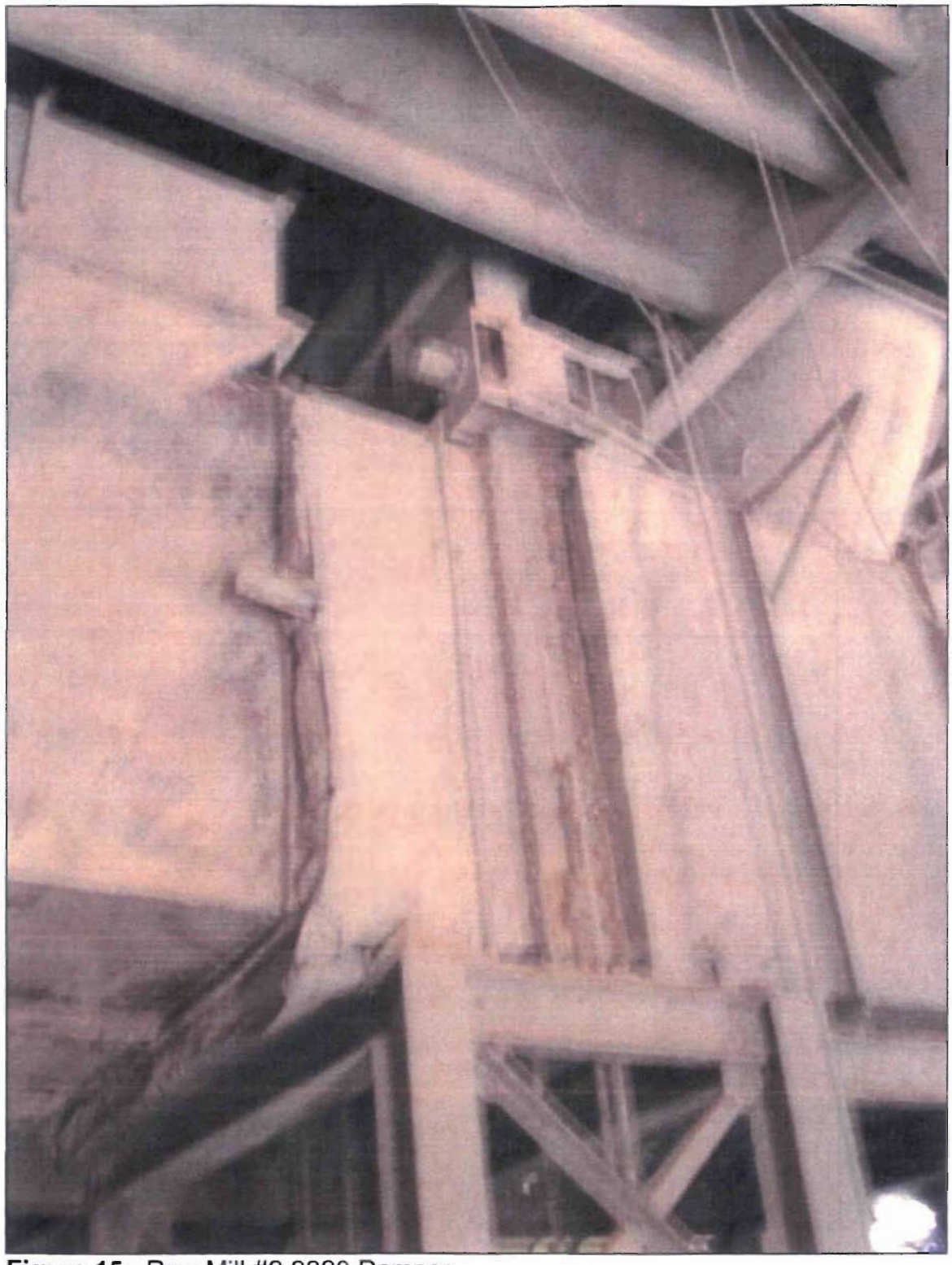


Figure 15: Raw Mill #2 2320 Damper.

Figure 16: Raw Mill #2 2321 Damper.

Figure 17: Raw Mill #2 2322 Damper.

Figure 18: Raw Mill #2 2323 Damper top, 2319 Damper bottom.

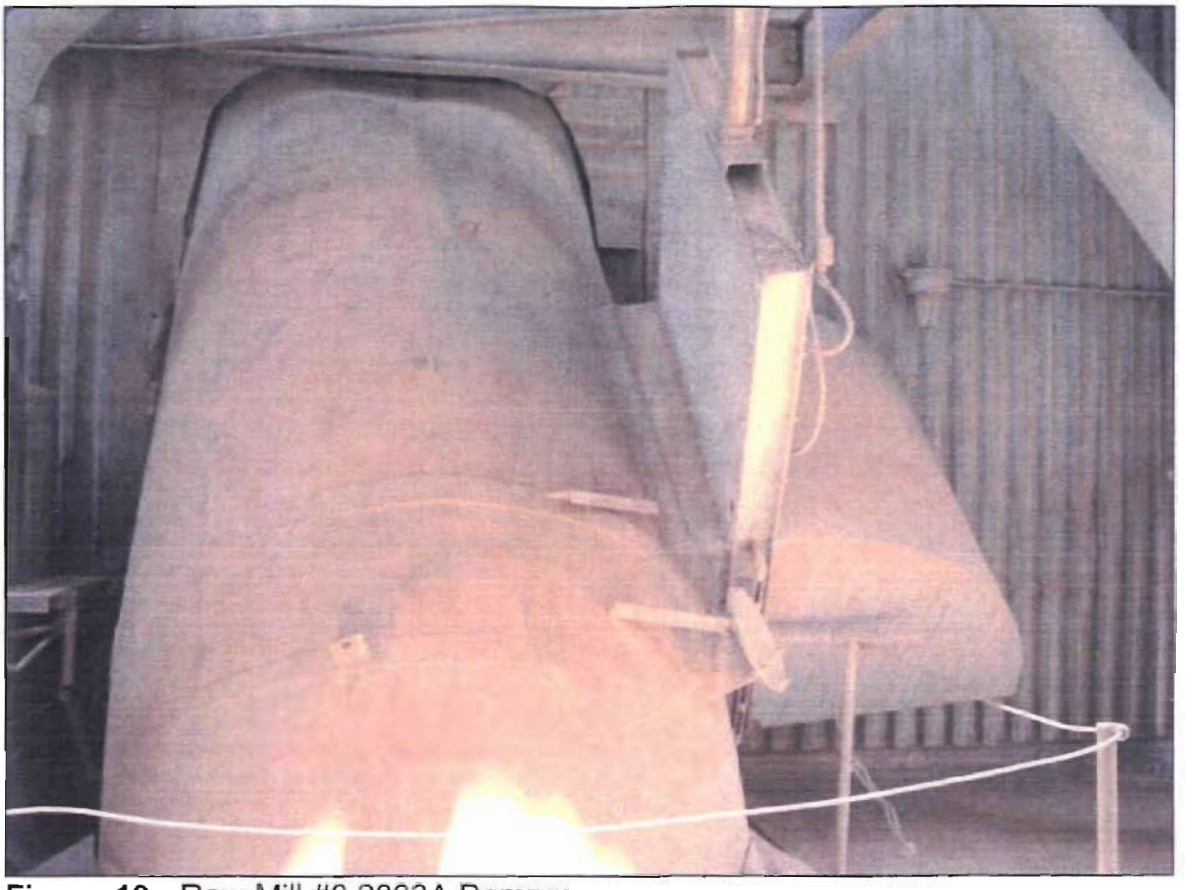


Figure 19: Raw Mill #2 2323A Damper.

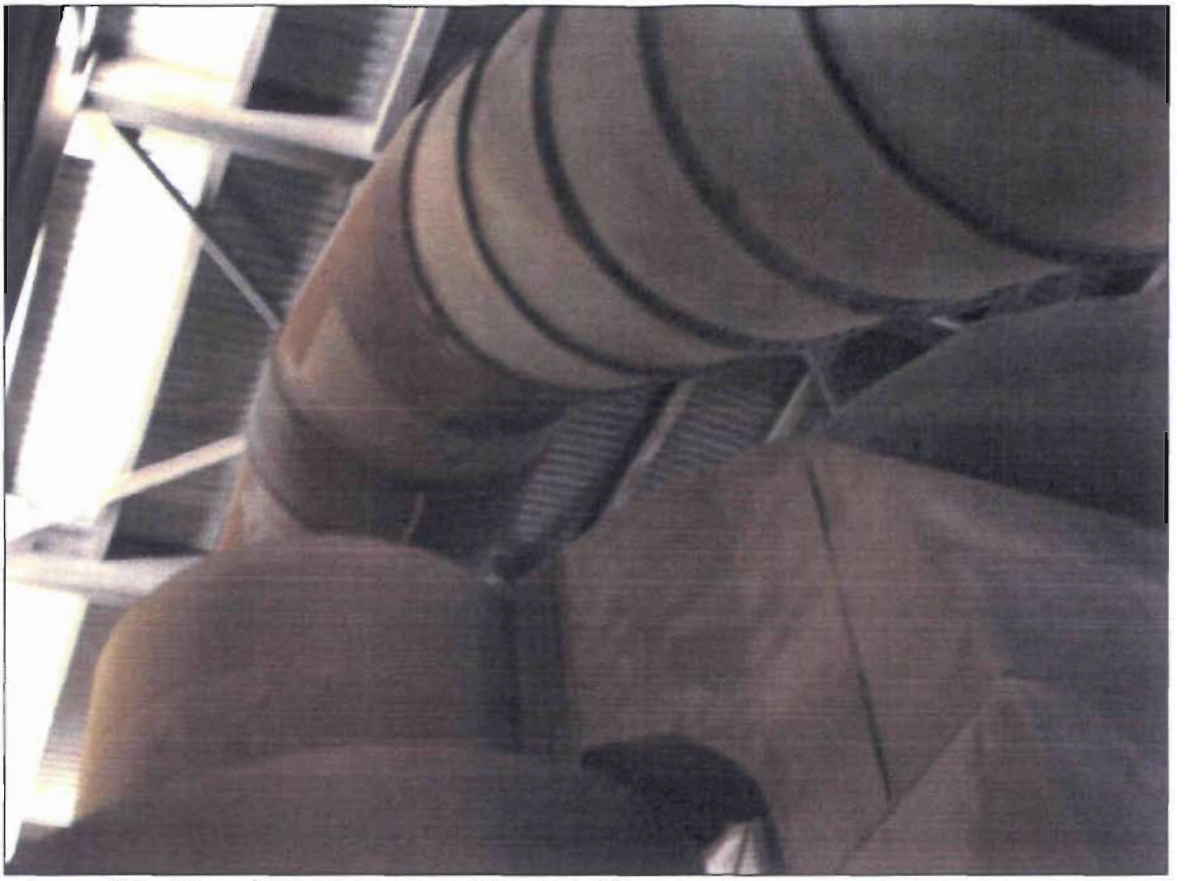


Figure 20: Raw Mill #2 by pass Ducting (1).

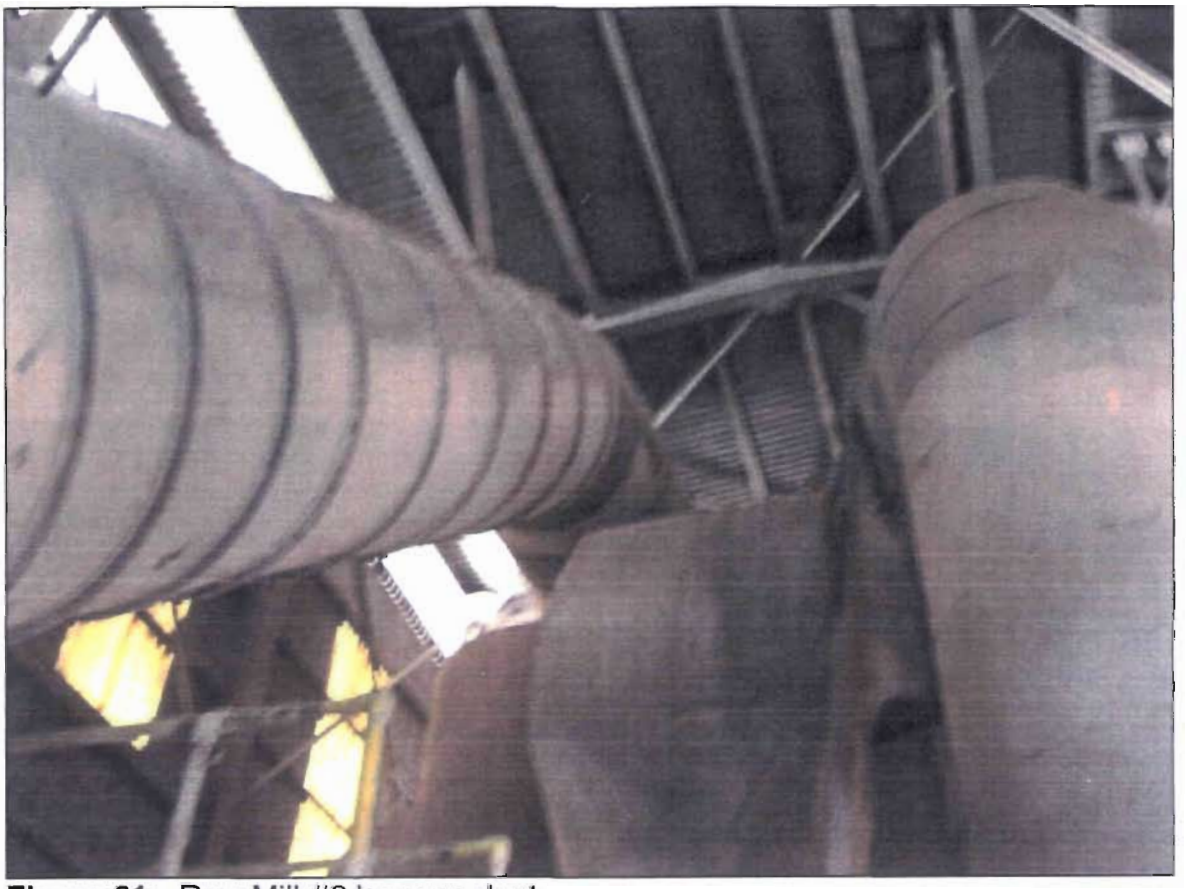


Figure 21: Raw Mill #2 by pass duct.

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 521-05-11
April 14, 2006

Mr. A. A. Linero, PE
FDEP
Program Administrator, South Permitting Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Request for Additional Information; DEP File 0530010-022-AC
Trial Period for Petroleum Coke and WTDF Firing at CEMEX Brooksville Plant

Dear Al:

CEMEX is in receipt of the Department's Request for Additional Information (RAI) dated January 10, 2006. On October 14, 2005, an air construction permit application for various projects at the CEMEX Brooksville Plant (Project No. 0530010-018-AC; PSD-FL-362) was submitted. On December 12, 2005 a separate application to address the burning of petcoke and tires on a trial basis was submitted to the Department. It is our understanding that the Department plans to handle this project in phases beginning with the trial burn and testing period. A separate RAI was sent out by the Department addressing the PSD application for the various projects including the use of petroleum coke and tires and a response was submitted on March 1, 2006. All of the comments are addressed below in the order they appear in the referenced letter.

1. CEMEX is proposing a six month trial period. Please explain why a 6-month trial period is necessary to conduct the proposed testing.

Response: The trial period for using petroleum coke and WTDF as fuels or supplemental fuels at the CEMEX Brooksville cement plant was proposed by CEMEX at a suggestion by the Department. The purpose for the suggestion, as we understand, was to allow CEMEX to develop an adequate record of emission data to support a permit application requesting the continued use of petcoke and WTDF. The six-month period is proposed to allow CEMEX time to make the modifications necessary to the two kilns to use the two fuels (including the installation of a

WTDF feed system on Kiln No. 2), to allow CEMEX to develop the test protocol addressed in Paragraph 3 of this letter and to allow CEMEX time to certify the NOx and CEMS prior to using either of the two fuels as addressed in Paragraph 4 of this letter.

Once the permit is issued, CEMEX will make the necessary modifications to Kiln No. 1 and No. 2 to burn petcoke and will make the modifications necessary to Kiln No. 2 to burn WTDF. CEMEX will also develop the test protocol requested by the Department and certify the CO and NOx CEMS. These activities will consume a portion of the six-month trial period.

Once the modifications and other pre-burn activities have been completed, CEMEX will have to evaluate the capability of the coal mills for grinding petcoke and/or select a petcoke that can be suitably ground by the mills. Once petcoke firing and WTDF firing commence, CEMEX will have to evaluate firing conditions and other factors necessary for the kilns to operate in a stable and normal manner while operating at or near permitted production rates. All of these activities will take time.

Once the two kilns are operating normally with the two alternative fuels, CEMEX can begin developing emission data that can be used to support the permit application for the permanent use of petcoke and WTDF. The development of these emission data and the analysis of these data will require probably 3-4 months.

In evaluating the request for the six-month trial period, the Department should also consider that trial periods of similar duration have been approved for other cement companies in the state (e.g., the six-month trial period granted for a production rate increase evaluation to Rinker for their Miami cement plant).

2. CEMEX is also requesting that the current emission limits be temporarily lifted for both kilns (Kilns No. 1 and No. 2) during the trial period. Although the Department may require compliance with all existing emissions limits during the trial period, please provide more precise details as to which pollutant limitations should be lifted, and to what extent CEMEX feels the limits should be lifted.

Response: CEMEX will comply with the current permitted emission rates during the trial burn period. However, CEMEX requests that the current NOx and CO emission limits be allowed on a 30-day rolling average basis.

3. Please provide a detailed description of the testing protocol to be followed. At a minimum, please describe the procedure for establishing baseline emissions from each kiln, describe in more detail the various feed amounts of petroleum coke and tires that are expected to be fired in each kiln, and state which pollutant tests will be carried out for each testing scenario. This is not a request the exact testing protocol to be followed during the trial period, but rather a request for a more detailed description of the procedures and objectives of the project.

Response: A test protocol for the petcoke and TDF projects will be prepared and submitted under separate cover before any petcoke and/or TDF is used as fuel. The protocol will set forth the coal/petcoke ratios to be evaluated as well as the fraction of the pyroprocessing heat input provided by TDF. Additionally, the protocol will set forth operating conditions that will be monitored/adjusted to assure compliance is maintained with all regulated emissions.

4. CEMEX proposes to certify the recently installed NOx and CO CEMS during the trial period. The Department will require certification of these instruments prior to the trial period in the requested permit. Please comment and/or provide the certification documentation for the CO and NOx CEMS.

Response: CEMEX will certify the CEMS prior to firing any petcoke and/or TDF. The certification documentation will be submitted to the Department upon completion.

5. According to the application, "CEMEX may modify the firing system to an indirect-firing system." Please describe any work conducted or that will be conducted with respect to this change. Is this change planned for both kilns, and is it scheduled to take place during the trial period or prior to the beginning of the trial period?

Response: Please refer to Response No. 1 in the letter dated March 1, 2006.

6. CEMEX has requested the ability to burn 100% petroleum coke during the trial period. In the application it is stated that there may be a limitation to this ability "based on the sulfur/alkali ratio and/or other factors". What is the maximum amount of petroleum coke expected to be achieved? What are the "other factors" that may limit the use of petroleum coke?

Response: Please refer to Response No. 5 in the letter dated March 1, 2006.

7. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to such violations.

Response: CEMEX will respond to this question under separate cover.

8. With the low alkali levels in the native limestone, how will CEMEX compensate with the greater alkali requirements inherent in burning petroleum coke? Will it be necessary for CEMEX to use even more of the 16% LOI fly ash and less bauxite or sand or clay?

Response: Please refer to Response No. 5 in the letter dated March 1, 2006.

9. Provide the procedures for receiving and storing petroleum coke as well as controlling dust from handling. Provide procedures related to groundwater protection.

Response: Please refer to Response No. 3 in the letter dated March 1, 2006.

10. Are the coal mills capable of grinding petroleum coke to the specifications needed and to supply a 100% petroleum coke fuel stream for the two kilns? If not, what amount of petroleum coke are the mills capable of supplying to the two kilns?

Response: Please refer to Response No. 4 in the letter dated March 1, 2006.

11. Please provide information on the effects of additional vanadium and nickel found in petroleum coke upon the formation of sulfuric acid mist.

Response: Please refer to Response No. 6 in the letter dated March 1, 2006.

12. Please describe any work conducted or that will be conducted with respect to burning TDF. This should include any modifications made or to be made to the existing tire burning system on Kiln 1 and the proposed system on Kiln 2. Describe the handling and feeding system.

Response: Please refer to Response No. 7 in the letter dated March 1, 2006.

13. Given the lack of a tertiary air duct, how will CEMEX insure that sufficient air will be available in the area of the kiln riser to insure proper combustion of TDF and burn out of CO?

Response: Please refer to Response No. 8 in the letter dated March 1, 2006.

14. Describe the combustion zone within the riser and lower preheater including the residence time to insure maximum burnout of CO.

Response: Please refer to Response No. 9 in the letter dated March 1, 2006.

15. How will burning TDF and petroleum coke affect the heat balance as well as conditions related to dioxin formation and control?

Response: Please refer to Response No. 11 in the letter dated March 1, 2006.

16. Provide information from other CEMEX projects where petcoke or TDF have been used and summarize the resulting emission changes. Provide any test reports related to past petroleum coke or TDF test burns.

Response: Please refer to Response No. 15 in the letter dated March 1, 2006.

17. Please provide a summary for the past two years of the required daily sampling and recording of baghouse dust thallium concentration described in Condition B.20 of the facility Title V Operation Permit.

Response: Please refer to Response No. 17 in the letter dated March 1, 2006.

18. Does CEMEX waste baghouse dust in general or to meet the mentioned thallium requirements in particular?

Response: Please refer to Response No. 18 in the letter dated March 1, 2006.

19. Where is the dust stored or where is it disposed or sold?

Response: Please refer to Response No. 19 in the letter dated March 1, 2006.

If you have any questions regarding these issues, please contact me at 352-377-5822 or FBergen@kooglerassociates.com, or Charles Walz at 352-799-2011 or charles.walz@cemexusa.com.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

Fawn W. Bergen, P.E.
PE Seal # 61614
Project Engineer

FB

cc: J. Bins, CEMEX
J. Gill, CEMEX
C. Walz, CEMEX

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

Department of
Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

January 10, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Re: DEP File 0530010-022-AC
Trial Period for Petroleum Coke and WTDF Firing at CEMEX Brooksville Plant

The Department originally received an air construction permit application on October 14th for various projects at the CEMEX Brooksville Plant (Project No. 0530010-018-AC, PSD-FL-362). Included in this application was the request for use of up to 100% petroleum coke as a fuel in Kilns 1 and 2, and the use of tire-derived fuel (TDF) in Kiln No. 2. On November 15 the Department sent a Request for Additional Information addressing the completeness of this application.

On December 12, 2005, the Department received an application for an air construction permit to allow the firing of petroleum coke in Kilns No. 1 and No. 2, and waste tire derived fuel (WTDF) in Kiln No. 2 during a trial period to assess the affect of these fuels on emissions.

The Department has determined that the application is incomplete. The Department requests submittal of additional information in order to continue processing your application pursuant to Rules 62-4.055, and 62-4.070 F.A.C., Permit Processing. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

The following information is required to complete the application:

1. CEMEX is proposing a six month trial period. Please explain why such an extended period may be necessary to conduct the proposed testing.
2. CEMEX is also requesting that the current emission limits be temporarily lifted for both kilns (Kilns No. 1 and No. 2) during the trial period. Although the Department may require compliance with all existing emissions limits during the trial period, please provide more precise details as to which pollutant limitations should be lifted, and to what extent CEMEX feels the limits should be lifted.

3. Please provide a more detailed description of the testing protocol to be followed. At a minimum, please describe the procedure for establishing baseline emissions from each kiln, describe in more detail the various feed amounts of petroleum coke and tires that are expected to be fired in each kiln, and state which pollutant tests will be carried out for each testing scenario. This is not a request for the exact test protocol to be followed during the trial period, but rather a request for a more detailed description of the procedures and objectives of the project.
4. CEMEX proposes to certify the recently installed NO_X and CO CEMS during the trial period. The Department will require certification of these instruments prior to the trial period in the requested permit. Please comment and/or provide the certification documentation for the CO and NO_X CEMS.
5. According to the application, "CEMEX may modify the firing system to an indirect-firing system". Please describe any work conducted or that will be conducted with respect to this change. Is this change planned for both kilns, and is it scheduled to take place during the trial period or prior to the beginning of the trial period?
6. CEMEX has requested the ability to burn 100% petroleum coke during the trial period. In the application it is stated that there may be a limitation to this ability "based on the sulfur/alkali ratio and/or other factors". What is the maximum amount of petroleum coke expected to be achieved? What are the "other factors" that may limit the use of petroleum coke?
7. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to any such violations.

The following questions were included in the Department's November 15 Request for Additional Information regarding the previous permit application (Project No. 0530010-018-AC, PSD-FL-362) to which the Department has not yet received a response. However, because of the relevance of the information to the current project, the Department is requesting that the following information be submitted for the completion of this project:

8. With the low alkali levels in the native limestone, how will CEMEX compensate with the greater alkali requirements inherent in burning petroleum coke? Will it be necessary for CEMEX to use even more of the 16% LOI fly ash and less bauxite or sand or clay?
9. Provide the procedures for receiving and storing petroleum coke as well as controlling dust from handling. Provide procedures related to groundwater protection.
10. Are the coal mills capable of grinding petroleum coke to the specifications needed and to supply a 100% petroleum coke fuel stream for the two kilns? If not, what amount of petroleum coke are the mills capable of supplying to the two kilns?
11. Please provide information on the effects of additional vanadium and nickel found in petroleum coke upon the formation of sulfuric acid mist.

12. Please describe any work conducted or that will be conducted with respect to burning TDF. This should include any modifications made or to be made to the existing tire burning system on Kiln 1 and the proposed system on Kiln 2. Describe the handling and feeding system.
13. Given the lack of a tertiary air duct, how will CEMEX insure that sufficient air will be available in the area of the kiln riser to insure proper combustion of TDF and burn out of CO?
14. Describe the combustion zone within the riser and lower preheater including the residence time to insure maximum burnout of CO.
15. How will burning TDF and petroleum coke affect the heat balance as well as conditions related to dioxin formation and control?
16. Provide information from other CEMEX projects where petroleum coke or TDF have been used and summarize the resulting emissions changes. Provide any test reports related to past petroleum coke or TDF test burns.
17. Please provide a summary for the past two years of the required daily sampling and recording of baghouse dust thallium concentration described in Condition B.20 of the facility Title V Operation Permit.
18. Does CEMEX waste baghouse dust in general or in order to meet the mentioned thallium requirements in particular?
19. Where is the dust stored or where is it disposed or sold?

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

Permit applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days. Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application.

If you have any questions regarding this matter, please call me at 850/921-9523 or Cindy Mulkey at 850/921-8968.

Sincerely,

A. A. Linero, P.E.
Program Administrator
South Permitting Section

Cc: Fawn Bergen, P.E.
Mara Nasca, DEP SWD
Charles Walz, CEMEX

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Darlene G. Peterson ☐ Agent ☒ Addressee

B. Received by *(Printed Name)* Darlene A. Peterson C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Transfer from service label)* 7000 1670 0013 3110 0161

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

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Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

7000 1670 0013 3110 0161

PS Form 3800, May 2000 See Reverse for Instructions

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 • FAX/377-7158

KA 521-05-11
December 9, 2005

Mr. Al Linero
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

RE: Application for a Trial Burn of Petroleum Coke and Tires at CEMEX Cement, Inc., Brooksville Facility (ID No. 0530010)

Dear Al,

Enclosed please find six (6) copies of an air permit application for a trial burn of petroleum coke and tires in Kilns 1 and 2 at CEMEX Cement, Inc., Brooksville facility (ID No. 0530010). This application is a follow-up to the PSD application submitted in October, 2005, and a telephone conversation with you on November 28, 2005.

Please feel free to contact me at (352) 377-5822 or FBergen@kooglerassociates.com, or Charles Walz, CEMEX Cement Inc., at (352) 799-2011, if you have any questions regarding this submittal.

Very truly yours,

KOOGLER & ASSOCIATES

Fawn W. Bergen, P.E.
Project Engineer

FB

Enclosure: 6 copies-Air Permit Application

Department of Environmental Protection

Division of Air Resource Management

RECEIVED
DEC 12 2005
BUREAU OF AIR REGULATION

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option) – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **CEMEX Cement, Inc.**	
2. Site Name: **Brooksville Plant**	
3. Facility Identification Number: **0530010**	
4. Facility Location...: Street Address or Other Locator: **1630 Ponce de Leon Blvd.** City: **Brooksville** County: **Hernando** Zip Code: **34601**	
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☒ Yes ☐ No

Application Contact

1. Application Contact Name: **Fawn Bergen, PE, Project Engineer**
2. Application Contact Mailing Address... Organization/Firm: **Koogler & Associates** Street Address: **4014 N.W. 13th Street** City: **Gainesville** State: **Florida** Zip Code: **32609**
3. Application Contact Telephone Numbers... Telephone: **(352) 377-5822** ext. Fax: **(352) 377-7158**
4. Application Contact Email Address: **fbergen@kooglerassociates.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	12-12-05
2. Project Number(s):	0530010-022-AC
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☒ Air construction permit.

Air Operation Permit

☐ Initial Title V air operation permit.

☐ Title V air operation permit revision.

☐ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for an Air Construction Permit to authorize the use of petroleum coke and TDF in the No. 2 Kiln System and petroleum coke in the No. 1 Kiln System for a 180-day trial period. CEMEX will conduct performance testing and continuous monitoring of NOx and CO on Kilns 1 and 2 while burning petroleum coke and tires during this trial period. Refer to Attachment A for a detailed description of the project.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
003	No. 1 Cement Kiln	AC1A	
014	No. 2 Cement Kiln	AC1A	

Application Processing Fee

Check one: ☐ Attached - Amount: $ _____ ☒ Not Applicable

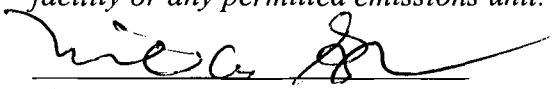
APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :
   Michael A. Gonzoles, Plant Manager
2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **CEMEX Cement, Inc.**
   Street Address: **Post Office Box 6**
   City: **Brooksville** State: **Florida** Zip Code: **34605-0006**
3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(352) 796-7241** ext. Fax: **(352) 754-9836**
4. Owner/Authorized Representative Email Address: **mgonzoles@cemexusa.com**
5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.



Signature

12/07/2005

Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   ☐ For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   ☐ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

4. Application Responsible Official Telephone Numbers...
   Telephone: ext. Fax:

5. Application Responsible Official Email Address:

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

   Signature Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Fawn Bergen, P.E.**
   Registration Number: **61614**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Koogler & Associates**
   Street Address: **4014 N.W. 13th Street**
   City: **Gainesville** State: **Florida** Zip Code: **32609**
3. Professional Engineer Telephone Numbers...
   Telephone: **(352) 377-5822** ext. Fax: **(352) 377-7158**
4. Professional Engineer Email Address: **fbergen@kooglerassociates.com**
5. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.

(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature 12/8/05
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone **17** East (km) **356.9** North (km) **3169.0**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) **28/38/34** Longitude (DD/MM/SS) **82/28/25**	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **32**	6. Facility SIC(s): **3241**
7. Facility Comment : **None**			

Facility Contact

1. Facility Contact Name: **Charles E. Walz, Environmental Manager**
2. Facility Contact Mailing Address... Organization/Firm: **CEMEX Cement, Inc.** Street Address: **Post Office Box 6** City: **Brooksville** State: **Florida** Zip Code: **34605-0006**
3. Facility Contact Telephone Numbers: Telephone: **(352) 796-7241** ext. Fax: **(352) 754-9836**
4. Facility Contact Email Address: **cwalz@cemexusa.com**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name: **N/A**
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1.	☐ Small Business Stationary Source	☒ Unknown
2.	☐ Synthetic Non-Title V Source	
3.	☒ Title V Source	
4.	☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5.	☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6.	☒ Major Source of Hazardous Air Pollutants (HAPs)	
7.	☐ Synthetic Minor Source of HAPs	
8.	☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9.	☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10.	☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11.	☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:		

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	**A**	**N**
PM_{10}	**A**	**N**
NO_X	**A**	**N**
SO_2	**A**	**N**
CO	**A**	**N**
VOC	**A**	**N**
HCl	**A**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID Nos. Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:
Not Applicable

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date: **10/05**
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date: **10/05**
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) ☐ Attached, Document ID:_____ ☒ Previously Submitted, Date: **10/05**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location: ☐ Attached, Document ID:_____ ☒ Not Applicable (existing permitted facility)
2. Description of Proposed Construction or Modification: ☒ Attached, Document ID: **Attachment A**
3. Rule Applicability Analysis: ☒ Attached, Document ID: **Attachment A**
4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable
6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable
7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID:_____ ☒ Not Applicable

FACILITY INFORMATION

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID: ☒ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☐ Attached, Document ID:_____ ☒ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☐ Attached, Document ID:_____
   ☒ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☐ Attached, Document ID:_____
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☐ Attached, Document ID:_____ ☒ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **Cement Kiln No. 1**

3. Emissions Unit Identification Number: **003**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**32**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

016 – Baghouse – High Temperature (Fuller Draco Custom ID No. E-55)
205 – Low NO_x burners
032 – Ammonia injection (SNCR)

2. Control Device or Method Code(s): **016, 205, 032**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **165 TPH; 1,300,000 TPY preheater feed (12-consecutive month period)**
2. Maximum Production Rate:
3. Maximum Heat Input Rate: **300** million Btu/hr **(30-day average)**
4. Maximum Incineration Rate: pounds/hr tons/day **N/A**
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment:

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **No. 1 Kiln Stack**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **150 feet**	7. Exit Diameter: **13.0 feet**
8. Exit Temperature: **285°F**	9. Actual Volumetric Flow Rate: **315,00 acfm**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: **195,785 dscfm**	12. Nonstack Emission Point Height: **N/A** feet	
13. Emission Point UTM Coordinates... Zone: 17 East (km): **356.250** North (km): **3168.370**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln**		
2. Source Classification Code (SCC): **3-05-006-22**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **165**	5. Maximum Annual Rate: **1,300,000**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **Segment represents preheater feed rate. Annual rate based on 150 TPH and 8,760 hr/yr and an operating factor of 99%.**		

Segment Description and Rate: Segment 2 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln**		
2. Source Classification Code (SCC): **3-05-006-22**	3. SCC Units: **Tons Clinker Produced**	
4. Maximum Hourly Rate: **99.0**	5. Maximum Annual Rate: **780,000**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **The maximum rates are based on the maximum preheater rates times 0.60:** **Maximum hourly rate = 165 TPH x 0.60 = 99.0 TPH** **Maximum annual rate = 1,300,000 TPY x 0.60 = 780,000 TPY**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 2); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-005-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.116**	5. Maximum Annual Rate: **18,536.2**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **141.3**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 4 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 4); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-005-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.06**	5. Maximum Annual Rate: **18,045.6**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **145.6**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 5 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Residual Oil (No. 5); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-004-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.016**	5. Maximum Annual Rate: **17,660.16**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **148.8**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 6 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Residual Oil (No. 6); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-004-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **1.982**	5. Maximum Annual Rate: **17,362.32**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **151.3**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 9 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Solid Waste; Tires [Whole Tire-Derived Fuel (WTDF)]**		
2. Source Classification Code (SCC): **3-90-012-99**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **2.14**	5. Maximum Annual Rate: **18,746.4**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **28**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr. The maximum utilization/firing rate of WTDF shall not exceed 20% of the total Btu heat input, or 2.14 TPH (daily average).**		

Segment Description and Rate: Segment 10 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Petroleum Coke**		
2. Source Classification Code (SCC): **3-90-008-89**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **11.28**	5. Maximum Annual Rate: **98,813**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **26.6**
10. Segment Comment: **Maximum rates are based on the heat input rate of 300 MMBtu/hr and a heating value of 13,300 Btu/lb.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 11 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Liquid Waste – On-site Generate Non-Hazardous Waste Used Oil and Grease**		
2. Source Classification Code (SCC): **3-90-013-89**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: **5.0 (rolling-monthly basis)**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum rate based on Permit No. 0530010-002-AV.**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**	**None**	**EL**
PM_{10}	**016**	**None**	**EL**
SO_2	**None**	**None**	**EL**
NO_X	**205/032**	**None**	**EL**
CO	**None**	**None**	**EL**
VOC	**None**	**None**	**EL**
DIOX	**None**	**None**	**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **29.7** lb/hour **118.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.18 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 29.7 lb/hr (1-hr average)
Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.18 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **29.7** lb/hour **118.3** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 5 or 201/201A.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **29.7** lb/hour **118.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.18 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Hourly: 29.7 lb/hr (1-hr average)** **Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.18 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **29.7** lb/hour **27.0** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 5 or 201/201A.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **16.5** lb/hour **65.7** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.10 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**
8. Calculation of Emissions: **Hourly: 16.5 lb/hr (1-hr average)** **Annual: 15.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 65.7 TPY**	
9. Pollutant Potential/Estimated Fugitive Emissions Comment: **CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.10 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **16.5** lb/hour **65.7** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 6C.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
NO_X	**N/A**

3. Potential Emissions:	4. Synthetically Limited?
301 lb/hour **1,204.5** tons/year	☐ Yes ☒ No

5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable**
to tons/year

6. Emission Factor: **1.83 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 301 lb/hr (1-hr average)
Annual: 275 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 1,204.5 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:
CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **1.83 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **301** lb/hour **1,204.5** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 7E.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **198.0** lb/hour **788.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **1.20 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 198.0 lb/hr (1-hr average)
Annual: 180.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 788.4 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **1.20 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **198.0** lb/hour **788.4** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 10.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**

3. Potential Emissions: **14.9** lb/hour **59.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No

5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable**
to tons/year

6. Emission Factor: **0.09 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 14.9 lb/hr (1-hr average)
Annual: 13.6 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 59.57 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:
CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.09 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **14.9** lb/hour **59.6** tons/year
5. Method of Compliance: **Compliance test using EPA Method 25A; when required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **DIOX**	2. Total Percent Efficiency of Control: **N/A**
2. Potential Emissions: **2.7 E-07** lb/hour (max) **7.1 E-07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: – **0.4 ng/dscm at 7% O_2 - R.M. operating** **0.2 ng/dscm at 7% O_2 – R.M. not operating** Reference: Permit No. **40 CFR 63, Subpart LLL**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Assume Raw Mill (R.M.) operates 90% of the time.

R.M. Operating:

0.4 ng/dscm x 3230 dscm/min @ 7% O_2 x 60 min/hr x f (1) = 1.7 E-07 lb/hr (max hrly)

R.M. Not Operating:

0.2 ng/dscm x 3230 dscm/min @ 7% O_2 x 60 min/hr x f (1) = 0.85 E-07 lb/hr

Annual:

[(1.7 x 0.9) + (0.85 x 0.1)| x E-07 x 8,760 hr/yr x 1/2,000 lb/ton = 7.1 E-07 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

(1) f = conversion from ng to lb

(2) No changes in actual or potential emissions are expected or requested as a result of this project.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.4 ng/dscm at 7% O_2 (T<400°F)** **0.2 ng/dscm at 7% O_2 (T>400°F)**	4. Equivalent Allowable Emissions: **1.7 E-07** lb/hour **71. E-07** tons/year
5. Method of Compliance: **Compliance testing using EPA Method 23.**	
6. Allowable Emissions Comment (Description of Operating Method): **No changes in actual or potential emissions are expected or requested as a result of this project.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20%** Exceptional Conditions: **20%** Maximum Period of Excess Opacity Allowed: **0** min/hour	
4. Method of Compliance: **COM & EPA Method 9**	
5. Visible Emissions Comment: **Based on Permit No. 0530010-002-AV and 40 CFR 63.1343(b)(2).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Existing** Model Number:	Serial Number:
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Continuous Opacity Monitor (COM). Based on Permit No. 0530010-002-AV and 40 CFR 63.1350(c)(1).**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO and/or O_2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Existing** Model Number:	Serial Number:
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Process monitors, not for compliance. Based on Permit No. 0530010-002-AV.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **5**

1. Parameter Code: **TEMP**	2. Pollutant(s): **Temperature**
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information... Manufacturer: **Existing** Model Number: Serial Number:	
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Based on 40 CFR 63.1350(f)(1).**	

Continuous Monitoring System: Continuous Monitor **4** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement: ☐ Rule ☐ Other	
4. Monitor Information... Manufacturer: **Servomex** Model Number: **4900 Continuous Emissions Analyzer** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **CO and NOx CEMS will be certified during trial period.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **Servomex** Model Number: **4900 Continuous Emissions Analyzer** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Unknown**

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **10/05**

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **10/05**

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☒ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Unknown**
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: **Not Applicable**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application **Not Applicable**
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_____
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Not Applicable

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

☐ This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

☐ This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section: **Cement Kiln No. 2**

3. Emissions Unit Identification Number: **014**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**N/A**	**32**	☐ Yes ☒ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment: **The application is for the use of WTDF and petroleum coke as supplemental fuels in the No. 2 Cement Kiln (EU 014). The requested tire usage rate is the same as for the No. 1 Kiln, previously permitted to burn tires. Continuous utilization/firing of whole tires as supplemental fuel to coal is requested. The maximum utilization/firing rate is 20.0% of the total BTU heat input; about 2.15 tons per hour, or 60 mmBTU/hr.**

Emissions Unit Control Equipment

3. Control Equipment/Method(s) Description:

016 – Baghouse – High Temperature (Fuller Draco Custom ID No. E-55)
205 – Low NO_x burners
032 – Ammonia injection (SNCR)

2. Control Device or Method Code(s): **016, 205, 032**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate: **165 TPH, 1,300,000 TPY preheater feed (12-consecutive 12-month period)**
2. Maximum Production Rate:
3. Maximum Heat Input Rate: **300** million Btu/hr
4. Maximum Incineration Rate: pounds/hr tons/day **N/A**
5. Requested Maximum Operating Schedule: hours/day days/week weeks/year **8,760** hours/year
6. Operating Capacity/Schedule Comment:

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **No. 2 Kiln Stack**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **105 feet**	7. Exit Diameter: **14.0 feet**
8. Exit Temperature: **250°F**	9. Actual Volumetric Flow Rate: **315,000 acfm**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **N/A** feet	
13. Emission Point UTM Coordinates... Zone: **17** East (km): **356.300** North (km): **3168.380**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln**		
2. Source Classification Code (SCC): **3-05-006-22**	3. SCC Units: **Tons Processed**	
4. Maximum Hourly Rate: **165**	5. Maximum Annual Rate: **1,300,000**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **Segment represents preheater feed rate. Annual rate based on 150 TPH and 8,760 hr/yr and an operating factor of 99%.**		

Segment Description and Rate: Segment 2 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; Mineral Products; Cement Manufacturing (Dry Process); Preheater Kiln**		
2. Source Classification Code (SCC): **3-05-006-22**	3. SCC Units: **Tons Clinker Produced**	
4. Maximum Hourly Rate: **99.0**	5. Maximum Annual Rate: **780,000**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **N/A**
10. Segment Comment: **The maximum rates are based on the maximum preheater rates times 0.60: Maximum hourly rate = 165 TPH x 0.60 = 99.0 TPH Maximum annual rate = 1,300,000 TPY x 0.60 = 780,000 TPY**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 3 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 2); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-005-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.116**	5. Maximum Annual Rate: **18,536.2**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **141.3**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 4 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Distillate Oil (No. 4); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-005-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.06**	5. Maximum Annual Rate: **18,045.6**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **145.6**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 5 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Residual Oil (No. 5); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-004-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **2.016**	5. Maximum Annual Rate: **17,660.16**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **148.8**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 6 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Residual Oil (No. 6); Cement Kiln**		
2. Source Classification Code (SCC): **3-90-004-02**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **1.982**	5. Maximum Annual Rate: **17,362.32**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **151.3**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 7 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Natural Gas; Cement Kiln**		
2. Source Classification Code (SCC): **3-90-006-02**	3. SCC Units: **Million Cubic Feet Burned**	
4. Maximum Hourly Rate: **0.293**	5. Maximum Annual Rate: **2,563.9**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **1,025**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

Segment Description and Rate: Segment 8 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Bituminous Coal; Cement Kiln**		
2. Source Classification Code (SCC): **3-90-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **12.0**	5. Maximum Annual Rate: **10,5120**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **25**
10. Segment Comment: **Maximum rates based on Permit No. 0530010-002-AV. Maximum annual rate based on the hourly rate and 8,760 hr/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 9 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Solid Waste; Tires [Whole Tire-Derived Fuel (WTDF)]**		
2. Source Classification Code (SCC): **3-90-012-99**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **2.14**	5. Maximum Annual Rate: **18,746.4**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **28**
10. Segment Comment: **Rates based on the current permitted rates (Permit No. 0530010-002-AV) for the Cement Kiln No. 1. The maximum utilization/firing rate of WTDF shall not exceed 20% of the total Btu heat input, or 2.14 TPH (daily average).**		

Segment Description and Rate: Segment 10 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Petroleum Coke**		
2. Source Classification Code (SCC): **3-90-008-89**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **11.28**	5. Maximum Annual Rate: **98,813**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit: **26.6**
10. Segment Comment: **Maximum rates are based on the heat input rate of 300 MMBtu/hr and a heating value of 13,300 Btu/lb.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 11 of 11

1. Segment Description (Process/Fuel Type): **Industrial Processes; In-Process Fuel Use; Liquid Waste – On-site Generate Non-Hazardous Waste Used Oil and Grease**		
2. Source Classification Code (SCC): **3-90-013-89**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate:	5. Maximum Annual Rate: **5.0 (rolling-monthly basis)**	6. Estimated Annual Activity Factor: **N/A**
7. Maximum % Sulfur: **N/A**	8. Maximum % Ash: **N/A**	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum rate based on Permit No. 0530010-002-AV.**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
PM	**016**	**None**	**EL**
PM_{10}	**016**	**None**	**EL**
SO_2	**None**	**None**	**EL**
NO_X	**205/032**	**None**	**EL**
CO	**None**	**None**	**EL**
VOC	**None**	**None**	**EL**
DIOX	**None**	**None**	**EL**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **29.7** lb/hour **118.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.18 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 29.7 lb/hr (1-hr average)
Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.18 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **29.7** lb/hour **118.3** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 5 or 201/201A.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM_{10}**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **29.7** lb/hour **118.3** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.18 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 29.7 lb/hr (1-hr average)
Annual: 27.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 118.26 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.18 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **29.7** lb/hour **27.0** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 5 or 201/201A.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV. The hourly limit is a 1-hour average and the annual limit is based on the 30-day rolling average.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
SO_2	**N/A**

3. Potential Emissions:	4. Synthetically Limited?
16.5 lb/hour **65.7** tons/year	☐ Yes ☒ No

5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable**
to tons/year

6. Emission Factor: **0.10 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 16.5 lb/hr (1-hr average)
Annual: 15.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 65.7 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.10 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **16.5** lb/hour **65.7** tons/year
5. Method of Compliance: **Annual compliance testing using EPA Method 6C.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_X**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **283.8** lb/hour **1,130.0** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **1.72 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 283.8 lb/hr (1-hr average)
Annual: 258.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 1,130.04 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:
CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **1.72 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **283.8** lb/hour **1,130.0** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 7E.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **CO**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **198.0** lb/hour **788.4** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **1.20 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 198.0 lb/hr (1-hr average)
Annual: 180.0 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 788.4 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **1.20 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **198.0** lb/hour **788.4** tons/year
5. Method of Compliance: **Annual compliance test using EPA Method 10.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **VOC**	2. Total Percent Efficiency of Control: **N/A**
3. Potential Emissions: **14.9** lb/hour **59.6** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **0.09 lb/ton dry kiln feed** Reference: **Permit No. 0530010-002-AV**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Hourly: 14.9 lb/hr (1-hr average)
Annual: 13.6 lb/hr (30-day rolling average) x 8,760 hr/yr x 1 ton/2,000 lb = 59.57 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

CEMEX is requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **OTHER**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.09 lb/ton dry kiln feed**	4. Equivalent Allowable Emissions: **14.9** lb/hour **59.6** tons/year
5. Method of Compliance: **Compliance test using EPA Method 25A; when required.**	
6. Allowable Emissions Comment (Description of Operating Method): **Based on Permit No. 0530010-002-AV.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **DIOX**	2. Total Percent Efficiency of Control: **N/A**
4. Potential Emissions: **4.7 E-07** lb/hour (max) **7.2 E-07** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): **Not Applicable** to tons/year	
6. Emission Factor: **– 0.4 ng/dscm at 7% O_2 - R.M. operating 0.2 ng/dscm at 7% O_2 – R.M. not operating** Reference: Permit No. **40 CFR 63, Subpart LLL**	7. Emissions Method Code: **0**

8. Calculation of Emissions:

Assume Raw Mill (R.M.) operates 90% of the time.

R.M. Operating:

0.4 ng/dscm x 3230 dscm/min @ 7% O_2 x 60 min/hr x f (1) = 1.7 E-07 lb/hr (max hrly)

R.M. Not Operating:

0.2 ng/dscm x 3230 dscm/min @ 7% O_2 x 60 min/hr x f (1) = 0.85 E-07 lb/hr

Annual:

[(1.7 x 0.9) + (0.85 x 0.1)] x E-07 x 8,760 hr/yr x 1/2,000 lb/ton = 7.1 E-07 TPY

9. Pollutant Potential/Estimated Fugitive Emissions Comment:

(3) f = conversion from ng to lb

(4) No changes in actual or potential emissions are expected or requested as a result of this project.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions: **N/A**
3. Allowable Emissions and Units: **0.4 ng/dscm at 7% O_2 (T<400°F)** **0.2 ng/dscm at 7% O_2 (T>400°F)**	4. Equivalent Allowable Emissions: **1.7 E-07** lb/hour **71. E-07** tons/year
5. Method of Compliance: **Compliance testing using EPA Method 23.**	
6. Allowable Emissions Comment (Description of Operating Method): **No changes in actual or potential emissions are expected or requested as a result of this project.**	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE20**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20%** Exceptional Conditions: **20%** Maximum Period of Excess Opacity Allowed: **0** min/hour	
4. Method of Compliance: **COM & EPA Method 9**	
5. Visible Emissions Comment: **Based on Permit No. 0530010-002-AV and 40 CFR 63.1343(b)(2).**	

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **5**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Existing** Model Number:	Serial Number:
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Continuous Opacity Monitor (COM). Based on Permit No. 0530010-002-AV and 40 CFR 63.1350(c)(1).**	

Continuous Monitoring System: Continuous Monitor **2** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO and/or O_2**
3. CMS Requirement:	☐ Rule ☒ Other
4. Monitor Information... Manufacturer: **Existing** Model Number:	Serial Number:
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Process monitors, not for compliance. Based on Permit No. 0530010-002-AV.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **5**

1. Parameter Code: **TEMP**	2. Pollutant(s): **Temperature**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **Existing** Model Number: Serial Number:	
5. Installation Date: **Unknown**	6. Performance Specification Test Date: **Unknown**
7. Continuous Monitor Comment: **Based on 40 CFR 63.1350(f)(1).**	

Continuous Monitoring System: Continuous Monitor **4** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **CO**
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **Servomex** Model Number: **4900 Continuous Emissions Analyzer** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: **CO and NOx CEMS will be certified during trial period.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **5** of **5**

1. Parameter Code: **EM**	2. Pollutant(s): **NOx**
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: **Servomex** Model Number: **4900 Continuous Emissions Analyzer** Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

Continuous Monitoring System: Continuous Monitor _ of _

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Unknown**

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **10/05**

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **10/05**

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Unknown**
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date **Unknown**
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(6) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(5)(h)6., F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☒ Attached, Document ID: **10/05 PSD Application** ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☐ Attached, Document ID: **Not Applicable**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application **Not Applicable**
   - ☐ Certificate of Representation (EPA Form No. 7610-1)
     - ☐ Copy Attached, Document ID:_____
   - ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
     - ☐ Attached, Document ID:_____
     - ☐ Previously Submitted, Date:_____
   - ☐ Not Applicable

Additional Requirements Comment

ATTACHMENT A
DESCRIPTION OF PROPOSED PROJECT

CEMEX Cement, Inc. (CEMEX) is proposing to modify its existing Brooksville Cement Plant. CEMEX produces Portland cement at its Brooksville facility. This facility consists of two cement kilns and associated material handling, grinding, storage, packaging, and shipping facilities.

Cement Kiln No. 1 is currently permitted to burn whole tire-derived fuel (WTDF), coal, Nos. 2, 4, 5, and 6 fuel oils, natural gas, and on-site generated non-hazardous waste used oil and grease. The maximum process preheater feed rate is 165 tons per hour (TPH), 1-hour maximum, and 150 TPH, rolling 30-calendar day average. The maximum heat input rate is 300 million British thermal units per hour (MMBtu/hr), daily average.

Cement Kiln No. 2 is currently permitted to burn coal, Nos. 2, 4, 5, and 6 fuel oils, natural gas, and on-site generated non-hazardous waste used oil and grease. The maximum process preheater feed rate is 165 tons per hour (TPH), 1-hour maximum, and 150 TPH, rolling 30-calendar day average. The maximum heat input rate is 300 million British thermal units per hour (MMBtu/hr), daily average.

CEMEX is proposing to burn petroleum coke in both kilns as well as to burn WTDF in Kiln No. 2. The requested maximum process preheater feed rate of each kiln will remain at 165 TPH and the annual feed rate will remain at 1,300,000 TPY. The No. 2 Cement Kiln's maximum utilization/firing rate of WTDF shall not exceed 20-percent of the total Btu heat input, or 2.14 TPH (daily average basis), which is the current permitted maximum rate of the No. 1 Cement Kiln. It is request that petroleum coke firing be permitted in each kiln at a rate of up to 300 MMBtu/hr; or 100-percent of the total heat input (each).

CEMEX may be limited in the ability to burn 100-percent petroleum coke based on the sulfur/alkali ratio and/or other factors. The company requests however, the opportunity to fire up to 100-percent petroleum coke should conditions allow.

CEMEX is requesting an air permit application for a trial burn of petroleum coke and tires in Kilns 1 and 2 to establish emissions limits, particularly for CO and NOx. Additionally, CEMEX will certify the NOx and CO CEMS recently installed during the trial period to produce certified NOx and CO emission data on a continuous basis. CEMEX will perform emissions testing on Kilns 1 and 2 while burning petroleum coke alone and petroleum coke and tires at various amounts of feed to determine the emissions limits and to determine the affect of sulfur (from petroleum coke) on the chemistry of the kilns and on SO_2 emissions. CEMEX is requesting an air construction permit for a 180-day period to complete the various emissions testing for the different kiln operating scenarios.

In order to reach the new emission levels based on this project, CEMEX may also modify the firing system to an indirect-firing system. This could help CEMEX achieve lower emission levels.

Upon completion of the trial period, CEMEX will submit a test report to FDEP along with the proposed emission limits for approval. Note that both SNCR and low-NOx burners were recently installed on Kilns 1 and 2 (refer to October 2005 PSD Application).

CEMEX is also requesting that the current emission limits be temporarily lifted for Kilns 1 and 2 during the trial period since various levels of fuel will be fed to the kiln to determine the effect on emissions, particularly CO, NOx, and SO_2. Reasonable precautions will be taken to the extent practical to minimize emissions during the trial period.

CEMEX

July 27, 2006

UPS Overnight Delivery and Fax

Ms. Cindy Mulkey
Engineer, Bureau of Air Regulation
Division of Air Resource Management
2600 Blair Stone Rd MS #5505
Tallahassee, Fl 32399-2400

RE: CEMEX Cement, Inc.
Brooksville Cement Plant
CEMEX DEP File No 0530010-022-AC
Trial Burn Tires for Kiln #2

Dear Cindy:

Please find enclosed the original Proof of Publication of the public notice for the above referenced construction project. The public notice is dated July 21, 2006 and ran in the Hernando Today section of the Tampa Tribune.

If there are any questions concerning this information please contact me at (352) 799-2011

Sincerely,

CEMEX Cement, Inc.

Charles E. Walz
Environmental Manager

cc: File

United States Operations
P.O. Box 6, Brooksville, Florida. 34605-0006. USA. Phone: (352) 796-7241, Fax: (352) 754-9836

HERNANDO TODAY

Published Daily
BROOKSVILLE, HERNANDO, FLORIDA
STATE OF FLORIDA
COUNTY OF HERNANDO:

Before the undersigned authority personally appeared Sylvia Spivey, who on oath says that he/she is Legal Ad Coordinator of the Hernando Today/Hernando Sunday, a daily newspaper published at Brooksville in Hernando County, Florida: that the attached copy of the advertisement, being a Legal Notice ..... in the matter of ...CEMEX/Brooksville Plant.. Public Notice of Intent To Issue Permit..... DEP File No. 0530010-022-AC..... in the ...n/a..... Court, was published in said newspaper in the issues of ...July 21, 2006..... .....

Affiant further says that the said Hernando Today/Hernando Sunday is a newspaper published at Brooksville, in said Hernando County, Florida, and that the said newspaper has heretofore been continuously published in said Hernando County, Florida, each week and has been entered as a second class mail matter at the post office in Brooksville, in said Hernando County, Florida for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sylvia Spivey
.....
(Signature of Affiant)

Sworn to and subscribed before me this 21 day of July, 2006

Denise Nohejl
.....
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2006
Commission # DD 361939

.....
(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

.....

Cemex/1790482

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0530010-022-AC

CEMEX Cement, Inc.
Brooksville Cement Plant
Kiln No. 2
Hernando County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit to CEMEX Cement, Inc. The permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel (TDF) in Kiln No. 2. The applicant's name and address are CEMEX Cement, Inc, Brooksville Cement Plant, Post Office Box 6, Brooksville, Florida 34605-0006.

The existing facility consists of two dry preheater kilns (Kiln No. 1 and Kiln No. 2). Both kilns are permitted to fire a variety of fuels including coal, fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. CEMEX is currently permitted to fire up to 20 percent waste tire derived fuel (WTDF) in Kiln No. 1.

CEMEX requested authorization to construct a tire feed system for Kiln No. 2, and to conduct temporary field-testing to determine site specific emission characteristics and technical feasibility of firing up to 20 percent whole tire derived fuel (TDF) in Kiln No. 2 on a permanent basis. Permanent use of the supplemental fuel would be an economic benefit for the facility. CEMEX has proposed to certify and collect data from the existing carbon monoxide (CO) and nitrogen oxide (NOx) continuous emissions monitors during the trial period, and to conduct testing for sulfur dioxide (SO_2) to establish "baseline" (firing only coal) emissions to be compared to emissions while firing coal and TDF.

Based on a literature review and review of similar testing performed on other cement kilns, the Department believes that the request for a trial period to test the feasibility of firing TDF in Kiln No. 2 is reasonable. Information acquired during the test period is also necessary before the Department will consider authorizing the permanent use of TDF in Kiln No. 2. However, the Department will require additional testing to that proposed by the applicant including testing for NOx, CO, volatile organic compounds (VOCs), dioxin/furans, PM/PM10 whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the

proposed by the applicant including testing for NOx, CO, volatile organic compounds (VOCs), dioxin/furans, PM/PM10, and visible emissions during the trial period. No emissions above the currently permitted levels are allowed during the trial period. Because there are no allowable emissions increases, a review of PSD applicability is not required.

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.
The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Permit. Written comments or requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 or the e-mail address provided below. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. If a petition for an administrative hearing on the Department's Intent to Issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent.

Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/744-6100
Fax: 813/744-6084

Thee complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Alvaro A. Linero, P.E., Program Administrator, South Permitting Section, Bureau of Air Regulation at: alvaro.linero@dep.state.fl.us and at 850/921-9523 or call 850/488-0114 for additional information. The application, key correspondence, draft permit and technical evaluation can be accessed at: http://www.dep.state.fl.us/Air/permitting/construction/cemex.htm
Publish: July 21, 2006

HERNANDO TODAY

Published Daily
BROOKSVILLE, HERNANDO, FLORIDA
STATE OF FLORIDA
COUNTY OF HERNANDO:

Before the undersigned authority personally appeared Sylvia Spivey, who on oath says that he/she is Legal Ad Coordinator of the Hernando Today/Hernando Sunday, a daily newspaper published at Brooksville in Hernando County, Florida: that the attached copy of the advertisement, being a Legal Notice ..... in the matter of ...CEMEX/Brooksville Plant.. Public Notice of Intent To Issue Permit..... DEP File No. 0530010-022-AC..... in the ...n/a..... Court, was published in said newspaper in the issues of ...July 21, 2006..... .....

Affiant further says that the said Hernando Today/Hernando Sunday is a newspaper published at Brooksville, in said Hernando County, Florida, and that the said newspaper has heretofore been continuously published in said Hernando County, Florida, each week and has been entered as a second class mail matter at the post office in Brooksville, in said Hernando County, Florida for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sylvia Spivey
(Signature of Affiant)

Sworn to and subscribed before me this 21 day of July, 2006

Denise Nohejl
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2008
Commission # DD 361939

(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

.....

Cemex/1790482

PUBLIC NOTICE OF INTENT TO ISSUE PERMIT

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No.
0530010-022-AC

CEMEX Cement, Inc.
Brooksville Cement Plant
Kiln No. 2
Hernando County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit to CEMEX Cement, Inc. The permit authorizes construction of a tire feed system for Kiln No. 2, and temporary field-testing to determine site specific emission characteristics and technical feasibility of firing whole tire derived fuel (TDF) in Kiln No. 2. The applicant's name and address are CEMEX Cement, Inc, Brooksville Cement Plant, Post Office Box 6, Brooksville, Florida 34605-0006.

The existing facility consists of two dry preheater kilns (Kiln No. 1 and Kiln No. 2). Both kilns are permitted to fire a variety of fuels including coal, fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. CEMEX is currently permitted to fire up to 20 percent waste tire derived fuel (WTDF) in Kiln No. 1.

CEMEX requested authorization to construct a tire feed system for Kiln No. 2, and to conduct temporary field-testing to determine site specific emission characteristics and technical feasibility of firing up to 20 percent whole tire derived fuel (TDF) in Kiln No. 2 on a permanent basis. Permanent use of the supplemental fuel would be an economic benefit for the facility. CEMEX has proposed to certify and collect data from the existing carbon monoxide (CO) and nitrogen oxide (NOx) continuous emissions monitors during the trial period, and to conduct testing for sulfur dioxide (SO2) to establish "baseline" (firing only coal) emissions to be compared to emissions while firing coal and TDF.

Based on a literature review and review of similar testing performed on other cement kilns, the Department believes that the request for a trial period to test the feasibility of firing TDF in Kiln No. 2 is reasonable. Information acquired during the test period is also necessary before the Department will consider authorizing the permanent use of TDF in Kiln No. 2. However, the Department will require additional testing to that proposed by the applicant including testing for NOx, CO, volatile organic compounds (VOCs), dioxin/furans, PM/PM10, and visible emissions during the trial period. No emissions above the currently permitted levels are allowed during the trial period. Because there are no allowable emissions increases, a review of PSD applicability is not required.

The Department will issue the permit with the attached conditions unless a petition or request for an extension of time in accordance with Rule 28-106.111, F.A.C., is filed within 14 days of publication of this notice or within 14 days of receipt of this notice, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

The Department will issue the FINAL Permit, in accordance with the conditions of the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.
The Department will accept written comments and requests for a public meeting concerning the proposed permit issuance action for a period of 14 (fourteen) days from the date of publication of this Public Notice of Intent to Issue Permit. Written comments or requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400 or the e-mail address provided below. Any written comments filed shall be made available for public inspection. If comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

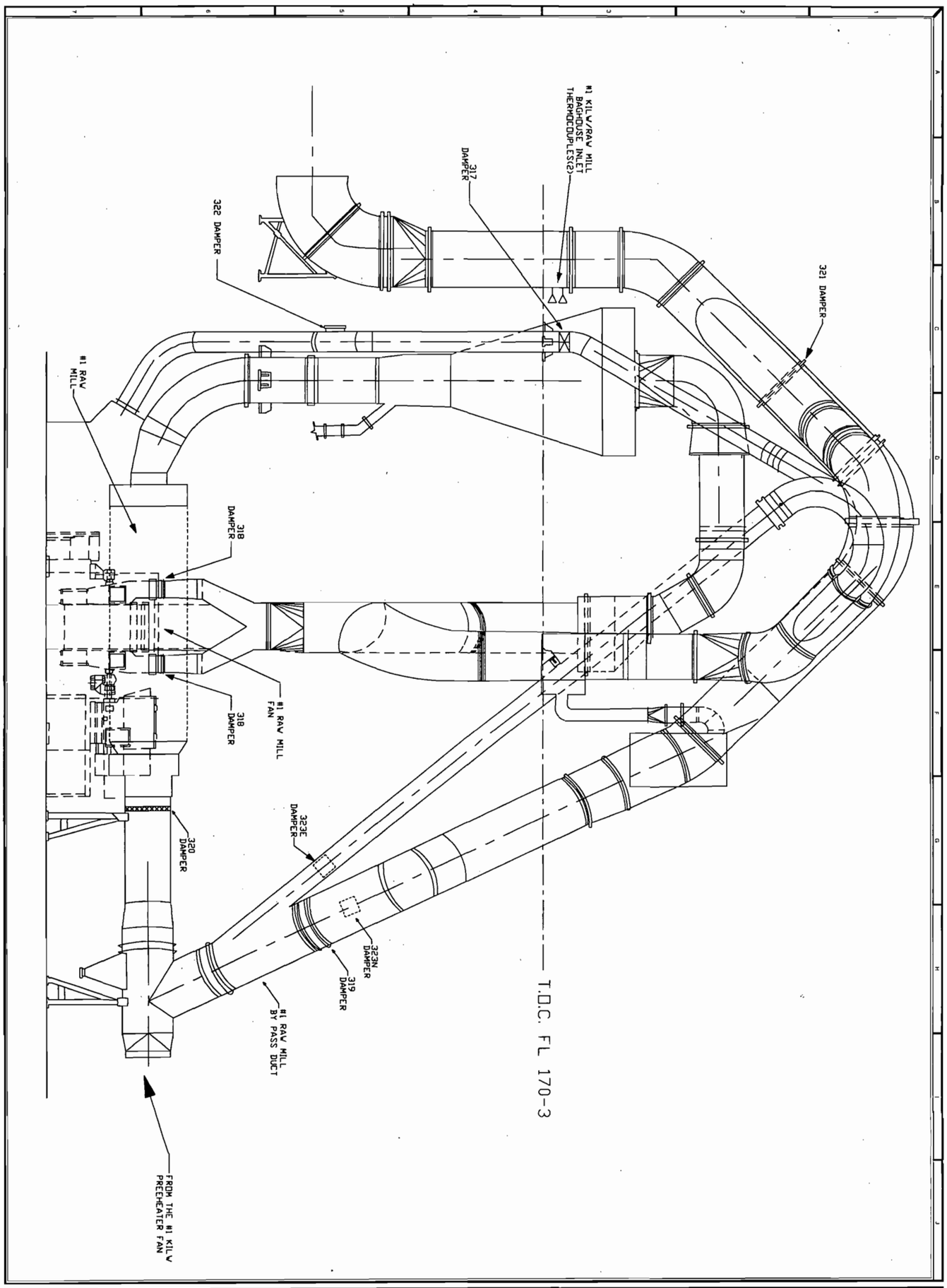
The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. If a petition for an administrative hearing on the Department's Intent to Issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent,

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

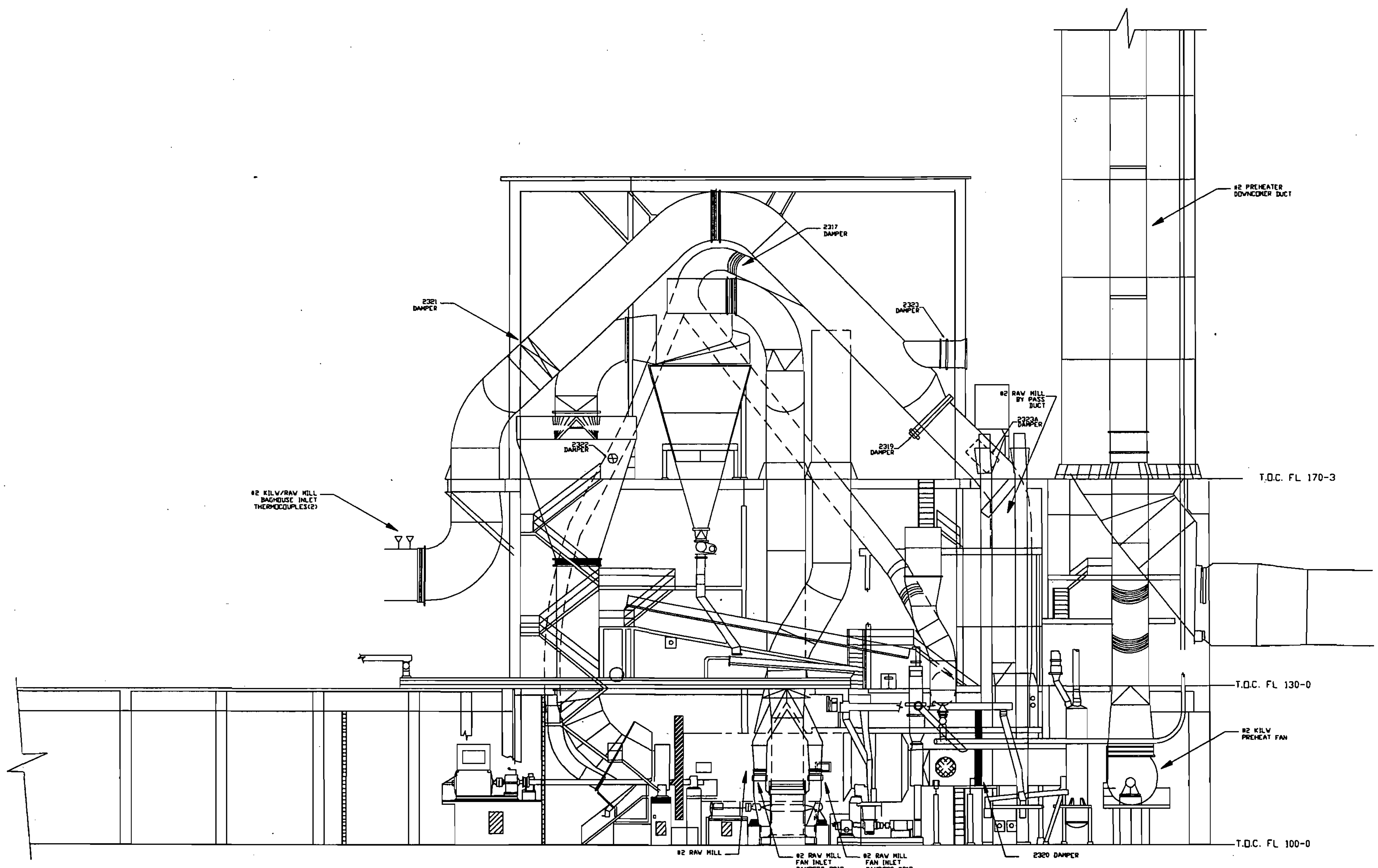
Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/744-6100
Fax: 813/744-6084

Thee complete project file includes the application, technical evaluations, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Alvaro A. Linero, P.E., Program Administrator, South Permitting Section, Bureau of Air Regulation at: alvaro.linero@dep.state.fl.us and at 850/921-9523 or call 850/488-0114 for additional information. The application, key correspondence, draft permit and technical evaluation can be accessed at: http://www.dep.state.fl.us/Air/permitting/construction/cemex.htm
Publish: July 21, 2006



PM/DRAWN BY: DC	CIVIL-TECH CONSULTING ENGINEERS, INC.	PROJECT	REVISION HISTORY
SCALE: NO SCALE	CIVIL ENGINEERS & PLANNERS	PROJECT	DESCRIPTION / REV. BY / DATE
DATE: 7-12-06	12 South Main Street, Brooksville, FL 34601		
REC: N/A	Phone - (352) 796-8319 / Fax - (352) 799-9203	#1 RAW MILL BY PASS DUCTING	
TOP: N/A	WWW.Civil-Tech.com		
MARKS: N/A	Registration # EB-000748		
JOB NUMBER: 0612			
SHEET NO. 1 OF 2	EXAMINED AND APPROVED DATE:		

This plan shall not be used as a construction document, unless stamped "APPROVED FOR CONSTRUCTION".



PROJECT
PROJECT
#2 RAW MILL BY PASS DUCTING

CIVIL-TECH CONSULTING ENGINEERS, INC.
CIVIL ENGINEERS & PLANNERS
12 South Main Street, Brooksville, FL 34601
Phone - (352) 796-6319 / Fax - (352) 799-9203
WWW.Civil-Tech.com
Registration # EB-000746

REVISION HISTORY

REV	DESCRIPTION	REV. BY	DATE
REV1		REVBY	REVDATE
REV2		REVBY	REVDATE
REV3		REVBY	REVDATE
REV4		REVBY	REVDATE
REV5		REVBY	REVDATE
REV6		REVBY	REVDATE
REV7		REVBY	REVDATE
REV8		REVBY	REVDATE
REV9		REVBY	REVDATE
REV10		REVBY	REVDATE
REV11		REVBY	REVDATE

PM/DRAWN BY: DJC
SCALE: NO SCALE
DATE: 7-12-06
SEC: N/A
TWP: N/A
RANGE: N/A
JOB NUMBER: 06100

CHECKED PE#
EXAMINED AND APPROVED
DATE:

SHEET NO.
2 OF 2

This plan shall not be used as a construction document, unless stamped 'APPROVED FOR CONSTRUCTION'.

Attachment C
Process Flow Diagrams

Attachment B
Engineering Drawings of Bypass Ductwork Showing Dampers

KODGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

Attachment A
Control Operating Procedures