MIAMI-DADE COUNTY, FLORIDA

MIAMI-DADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION
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May 1, 2001

CERTIFIED MAIL: 7000 0600 0027 7981 5918
RETURN RECEIPT REQUESTED

PERMITTEE:

Tarmac America, Inc.
455 Fairway Drive
Deerfield Beach, Fl 33441

Authorized Representative:
Hardy Johnson
President, Florida Division

Permit No. 0250020-010-AC
Issue Date: May 1, 2001
Expiration Date: October 31, 2003

PROJECT AND LOCATION:

Project:
The project encompasses the construction of a dry process modernization plant to include a new preheater/calciner/kiln, cooler, coal mill and raw mill. This new process will replace the existing wet kiln and cooler systems. A new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction Permit Number 0250020-008-AC, dated October 21, 1999. The facility will accomplish this increase in production while maintaining emissions through adjusting facility operating hours and increasing production efficiency.

Facility Description: Portland Cement Plant (SIC # 3241)
Facility Name: Tarmac-Pennsuco Cement
Location: 11000 NW 121 Way, Medley, Florida 33178
Lat./Long.: 25° 52' 30" N / 80° 22' 30" W
UTM: Zone 17; 562.8 Km. E; 2861.7 Km. N

This is Permit Number 0250020-010-AC to construct an air pollution source issued by the **Miami-Dade County Department of Environmental Resources Management (DERM) pursuant to Chapter 24, Code of Miami-Dade County and Chapter 403.087, Florida Statutes (F.S.).**

The Florida Department of Environmental Protection (FDEP) has permitting jurisdiction under Section 403.087, Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the FDEP recognizes the DERM as the approved local air pollution control program of Miami-Dade County. Through a Specific Operating Agreement, the FDEP delegated to the DERM the authority to issue or deny permits for this type of air pollution source located in Miami-Dade County.

NOTICE OF RIGHTS:

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 Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, at 33 SW 2nd Avenue, Suite 900, Miami, Florida 331301540 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the Clerk of the DERM.

STATEMENT OF BASIS:

This permit is issued under the provisions of **Chapter 24, Code of Miami-Dade County, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, and 62-204 through 62-297,** and in conformance with all existing regulations of the FDEP and the DERM rules. The above named owner or operator is hereby authorized to perform the work or construct the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the DERM and made a part hereof and specifically described in this permit.

Attached appendices and Tables made a part of this permit:

Appendix A – General Conditions
Appendix SS-1 – Stack Sampling Facilities
Table 297.310-1 – Calibration Schedule Table
Figure 1, Summary Report, Gaseous and Opacity Excess Emission and Monitoring System Performance

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

Tarmac America, Inc. operates the Pennsuco wet process portland cement manufacturing plant in Medley, Florida. A large portion of the facility was constructed prior to 1970. This facility consists of a coal handling system; raw feed system; kiln system; coolers; finish mills; slag dryer; clinker and cement storage and handling systems; cement distribution system; concrete block plant; and ready mix plant.

DERM issued a construction permit 0250020-008-AC to this facility on October 21, 1999 to modernize the existing operation. On November 14, 2000 the facility submitted a modified construction permit application to construct a new preheater/calciner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system. In addition, a new finish mill (No. 6) will be constructed to operate with units 3 & 4. Finish Mill units 1 & 2 will be shut down when the existing operation ceases.

The project will result in an increase in production at the facility while maintaining air pollution emissions at or below the levels allowed in the construction permit dated October 21, 1999. The facility will have a capacity of 250 tons per hour of clinker production and annual production will be limited (on a rolling 12-month average) to 1,642,500 tons per year of clinker production. The facility will accomplish this increase in production while maintaining emissions, through adjusting facility operating hours and increasing production efficiency.

EMISSIONS UNITS

This permit addresses the following emissions units:

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
001	Coal Handling	Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive)
002	Clinker Handling and Storage	Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins
003	Finish Mill	Finish Mill # 3, 4, & 6
004	Cement Storage, Packhouse & Loadout	Cement Silos 1-12, Packhouse & Bulk Loadout Units #1-3
005	Raw Mill and Pyroprocessing unit	Raw Mill, and Pyroprocessing consists of the Preheater/Calciner, Kiln, and Cooler
006	Raw Material Handling	Limestone/gypsum and additive storage silos and handling

SUBSECTION B. REGULATORY CLASSIFICATION

The Tarmac America Pennsuco Cement Plant directly emits more than 100 tons per year (TPY) of several regulated air pollutants and emits over 10 TPY of at least one hazardous air pollutant. Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in **Rule 62-204.200, F.A.C.**

This industry is listed in Table 62-212.400-1 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide, volatile organic compounds, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility per the definitions in Rule 62-210.200, F.A.C.

The Brownfield facility is also subject to 40 CFR 63, Subpart LLL, Portland Cement Manufacturing Plant, and 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants.

SIGNIFICANT DATES:

Permit Number 0250020-008-AC was issued on April 28, 1999.
Permit Number 0250020-009-AV was issued on October 26, 2000.
Permit Application and Attachments Received: November 14, 2000.
Additional information requested by DERM on December 13, 2000 and January 25, 2001.
Additional information received from applicant on January 3, 2001 and February 1, 2001.

SECTION II. FACILTY-WIDE CONDITIONS

ADMINISTRATIVE

A.1 Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Air Facilities Section of the Miami-Dade County Department of Environmental Resources Management (DERM), Suite 900, 33 Southwest Second Avenue, Miami, Florida 33130-1540.

A.2 Specific and General Conditions: The owner or operator shall be subject to the specific and general conditions of this permit and the owner or operator shall be aware of, and operate under, the attached General Conditions, attached as Appendix A of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S.
[F.A.C. Rule 62-4.160]

A.3 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

A.4 Forms and Application Procedures: 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.
[Rule 62-210.900, F.A.C.]

A.5 Expiration: This air construction permit shall expire on October 31, 2003. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the DERM of any delays in completion of the project, which would affect the startup day by more than 90 days.
[Rule 62-210.300(1), F.A.C., 62-4.090, F.A.C]

A.6 Other Permits: This air pollution permit does not preclude the owner or operator from obtaining any other types of required permits, licenses or certifications from the DERM or other departments or agencies.

A.7 Title V Permit is Required: This permit authorizes construction and/or installation of the permitted emissions units and initial operation to determine compliance with the FDEP and the DERM rules. An application for a Title V operation permit must be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, **90 days before the expiration date of this permit, but no later than 180 days after commencing operation.** To apply for a Title V operation permit, the applicant shall submit the appropriate application form, and such additional information as the DERM may by law require.
[F.A.C. Rule 62-4.030, 62-4.050, and 62-213.420(1)(a)2]

A.8 Applicable Regulations: Unless otherwise indicated, the construction of a dry process Portland Cement Plant and associated equipment shall be in accordance with the capacities and specifications stated in the application. This facility is subject to all applicable provisions of Chapter 24 Code of Miami-Dade County, Chapter 403, F.S. and Florida Administrative Code Chapters 62-4; 62-103; 62-204, 62-210, 62-212, 62-213, 62-296, 62-297; and the Code of Federal Regulations Section 40, Part 60. Specifically, this facility is subject to National Emissions Standards for Hazardous Air Pollutants for Portland Cement Plant, 40 CFR 63, Subpart LLL Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations.
[Rule 62-210.300, F.A.C.]

EMISSIONS LIMITING STANDARDS

A.9 General Visible Emissions Standard: Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density if which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20% opacity). The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1, F.A.C.]

A.10 Unconfined Emissions of Particulate Matter

(a) The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emissions.

(b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

Reasonable precautions may include, but are not limited to the following:

1. Paving and maintenance of roads, parking areas and yards.
2. Applying water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
3. Applying asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
4. Removing particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
5. Confining abrasive blasting where possible.
6. Landscaping and planting of vegetation.
7. Using hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
8. Enclosing or covering of conveyor systems.
9. Storing all materials, coal and petroleum coke at the plant under roof on compacted clay or concrete, or in enclosed vessels.
10. Locating water supply lines, hoses and sprinklers near all unenclosed materials to prevent unconfined particulate matter emissions.

11. Installing tire wash for bulk transport trucks leaving the plant, to remove particulate matter from vehicle tires before traveling on the facility's access roadways.

(c) In determining what constitutes reasonable precautions for a particular source, the DERM shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

A.11 General Pollutant Emissions Limiting Standards:

(a) 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 emissions control devices or systems deemed necessary and ordered by the DERM.
[Rule 62-296.320 (1)(a), F.A.C.]

(b) No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

NOTE: An objectionable odor is defined in Rule 62-210.200(203), F.A.C., as 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.

OPERATION AND MAINTENANCE

A.12 Final Construction Schedule: The permittee shall provide to the DERM a final construction schedule after selection of the contractor and before commencement of construction.
[Rule 62-4.070(3), F.A.C.]

A.13. The existing kiln No. 3 shall be permanently shut down no later than 180 days from the startup date of emissions unit No. 005 (Raw Mill and Pyroprocessing Unit). The shutdown date of kiln No.3 shall not be extended for any reason. The operation/shutdown of kiln No. 3 shall comply with the following conditions:

- Operation of kiln No. 3 shall not result in an exceedance of any 12-month rolling average ton per year emissions limit specified in condition B.23 and B.24 of this permit.
- Shut down of kiln No. 3 shall commence within 48-hours of introduction of kiln feed to the preheater/calciner, and shut down shall be completed within 5 days of commencement of such action. This schedule shall be followed each time kiln feed is introduced to the preheater/calciner.
- Simultaneous operation of kiln No. 3 and emissions unit No. 005 for the purpose of clinker production is prohibited, except during the duration of the shut down of kiln No. 3 (5 days).
- Dates of introduction of kiln feed to the preheater/calciner, and the dates of commencement and completion of kiln No. 3 shutdown must be recorded and reported to the DERM Air Facilities Section within 15 days of each mentioned action.
- A log of hourly clinker production from kiln No. 3 and emissions unit No. 005 for the 180 days after the startup of emissions unit No. 5 shall be maintained at the facility. These records must be submitted to the DERM Air Facilities Section on a weekly basis.

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

NOTE: Startup is defined as the setting in operation of an affected source for any purpose. Shutdown is defined as the cessation of operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]

A.14 Changes/Modifications: The owner or operator shall submit to the DERM, Air Facilities Section, for review and obtain approval for any changes in, or modifications to the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain an air construction permit prior to making the desired change.
[Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]

A.15 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the owner or operator shall notify the DERM, Air Facilities Section as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include, pertinent information as to the cause of the problem; the 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 and applicable rules.
[Rule 62-4.130, F.A.C.]

A.16 Circumvention: The owner or operator shall not circumvent any air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.
[Rules 62-210.650, F.A.C.]

A.17 Excess Emissions Requirements: The following excess emissions provisions can not be used to vary any NSPS or NESHAP requirements from any subpart of 40 CFR 60 or 40 CFR 63.

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units 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 DERM, Air Facilities Section for longer duration.
[Rule 62-210.700(1), F.A.C.]

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

MONITORING OF OPERATIONS

A.18 Determination of Process Variables:

(a) Required Equipment. The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emissions limiting standards.
[Rule 62-297.310 (5), F.A.C.]

(b) Accuracy of Equipment. Equipment and/or instruments used to directly or indirectly determine such 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]

TEST REQUIREMENTS

A.19 Test Performance: DERM shall be notified of startup date in writing by the facility within 15 days of initial startup. Within 60 days after achieving the maximum production rate at which this facility will be operated, but no later than 180 days after initial startup, the owner or operator shall conduct performance tests, pursuant to 40 CFR 63.1349, Performance Tests, Rule 62-296.310 F.A.C., 40 CFR 63, Appendix A and 40 CFR 51, Appendix M. In the event that the facility fails any initial or annual performance test, a retest shall be conducted within 30 days of the test date of the failed test. No other test method shall be used unless approval from the DERM has been received in writing. Unless otherwise stated in the applicable emissions limiting standard rule, testing of emissions shall be conducted with the emissions unit(s) operating at permitted capacity pursuant to Rule 62-297.310(2) F.A.C.
[Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, and 62-4.070(3) F.A.C.]

NOTE: Startup is defined as the setting in operation of an affected source for any purpose.
[40 CFR 63.2, Definitions]

A.20 Clinker Production Rate Determination: Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test according to a factor based on the preheater/precalciner feed rate. The permittee shall notify the DERM of the preheater/precalciner feed rate and the factor used to determine the clinker production rate in advance of the commencement of any test(s). The rate of clinker production shall be used to determine compliance with all clinker-based emission limits in the permit for that test.
[Rule 62-4.070(3), F.A.C.]

A.21 Test Procedures/Test Reports: All test procedures and test reports shall meet all applicable requirements of the Florida Administrative Code Chapter 62-297.
[Rule 62-297.310 (4), F.A.C.]

A.22 Test Notification: Unless otherwise specified in this permit, the DERM, Air Facilities Section shall be notified in writing of expected compliance test dates (when required) at least fifteen (15) days prior to compliance testing. The notification shall include the following information: the date, time, and location of each test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner.
[Rule 62-297.310(7)(a)9, F.AC.]

A.23 Special Compliance Tests: When the DERM, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emissions standard contained in Rule 62-204 through 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the DERM., Air Facilities Section.
[Rule 62-297.310(7)(b), F.A.C.]

A.24 Stack Testing Facilities: The owner or operator shall install stack-testing facilities in accordance with Rule 62-297.310(6), F.A.C.

A.25 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in Rule 62-297.620, F.A.C.

REPORTS AND RECORDS

A.26 Duration of Record Keeping: Upon request, the permittee shall furnish all records and plans required under DERM and FDEP rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the DERM. 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 for this permit. These materials shall be retained at least five years from the date of the sample, measurement, report, or application unless otherwise specified by DERM or FDEP rule.
[Rules 62-4.160(14)(a)&(b) and 62-213.440(1)(b)2.b., F.A.C.]

A.27 Emissions Compliance Stack Test Reports:
(a) A *test report* indicating the results of the required compliance tests shall be filed with the DERM, Air Facilities Section as soon as practical, but no later than 45 days after the last sampling run is completed.
[Rule 62-297.310, F.A.C.]
(b) The *test report* shall provide sufficient detail on the tested emissions unit and the procedures used to allow the DERM to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed, other than for EPA Method 9 Test, in Rule 62-297.310 (8), F.A.C.
[Rule 62-297.310, F.A.C.]

A.28 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Facilities Section of the DERM, within (1) working day (excluding weekends and legal holidays) of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the DERM may request a written summary report of the incident.
[Rules 62-4.130 and 62-210.700(6), F.A.C.]

A.29 Excess Emissions Report - Malfunctions: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the DERM in accordance with Rule 62-4.130, F.A.C. In addition, a full written report on the malfunctions shall be submitted in a quarterly report.
[Rule 62-210.700(6), F.A.C.]

A.30 Annual Operating Report for Air Pollutant Emitting Facility. Before March 1st of each year, the owner or operator shall submit to the DERM this required report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year.
[Rule 62-210.370(3), F.A.C.]

A.31 Central File Requirements: This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance log to include, at a minimum, the following information:

- The data collected from in-stack monitoring instruments
- The records on daily feed rates and clinker production rate
- The amount and type of fuel burned
- Calibration logs for all instruments
- Maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit;
- The following fuel records shall be maintained for a minimum of five (5) years and made available upon request:

    1. Coal/Petroleum Coke

        (a) The coal/petroleum coke usage rate in tons per hour on a 24-hour basis;

        (b) The average sulfur content and heating value (Btu/lb) of each coal shipment based upon supplier analysis or analysis of a sample representative of the shipment (trainload).

    2. Liquid Fuels

        (a) The fuel type (number) and usage rate in gal per day;

        (b) Records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon supplier analysis or analysis of a sample representative of the shipment.

    3. Natural Gas

        (a) The fuel usage rate in MMBtu per day;

All measurements, records, and any other data required to be maintained by Tarmac shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the DERM upon request. DERM shall be notified in writing at least 15 days prior to the testing (auditing) of any emission measurement instrument required to be operated by these specific conditions in order to allow witnessing by authorized personnel.
[Rule 62-4.070(3), F.A.C.]

OTHER REQUIREMENTS

A.32 Used Oil and Grease: Used oil and grease burned at this facility shall not be a hazardous waste as defined by 40 CFR Part 261.3 or Rule 62-730.030, F.A.C. It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. These fuels shall be burned in compliance with Section 403.769(3), Florida Statutes.

A.33 Other Regulations: The owner or operator shall comply with applicable provisions of Rule 62-710, Used Oil Management and 40 CFR Parts 279, Standards for the Management of Used Oil.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

THIS SECTION ADDRESSES THE FOLLOWING EMISSIONS UNITS

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
001	Coal Handling	Coal Feed Bin, Pet Coke Feed Bin, Coal Mill (Pet Coke- Coal) Handling and Storage (Fugitive)
002	Clinker Handling and Storage	Clinker Transfer from Burner Building, Clinker Silo, Clinker Transfer and Clinker Bins
003	Finish Mill	Finish Mill # 3, 4, & 6
004	Cement Storage, Packhouse & Loadout	Cement Silos 1-12, Packhouse, Bulk Loadout Units #1-3
005	Raw Mill and Pyroprocessing System	Raw Mill, and Pyroprocessing consists of the Preheater/Calciner, Kiln, and Cooler
006	Raw Material Handling	Limestone/gypsum and additive storage silos and handling

B.0 **Operational Requirements, Emissions Limitations and Performance Standards**
Attachment "40 CFR 63, Subpart A" is incorporated by reference.

EMISSIONS UNIT NO. 001 - COAL HANDLING

Operational Requirements

B.1 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except baghouses 241.BF01 and 241.BF02 which may not exceed 4,000 hours per year.
[Requested by permittee in application received November 14, 2000]

B.2 Coal/Petroleum Coke Maximum Usage: The maximum combined usage of coal and petroleum coke is 30 TPH on a 24-hour block average and 190,000 TPY. The maximum petroleum coke usage rate shall not exceed 20 TPH on a 24-hour block average.
[Rule 62-210.200 & 62-4.070(3) F.A.C., established by permittee in application received November 14, 2000]

B.3 Particulate and Fugitive Emissions: Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below:
(1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
(2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
(3) Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc., during dry periods as necessary to all facilities to maintain an opacity of less than 20 percent at the property line for fugitive emission sources.
[Rule 62-296.320(4)(c), F.A.C.; 62-4.070(3)]

Emissions Limitations and Performance Standards

B.4 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the coal handling system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits listed in the following table:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/dscf)	Flow Rate acfm dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	Potential PM Emissions (TPY)
Dump Hopper (Transfer)	241-BF01 Pending Pending	0.01	2,700 2,700	Pending	Pending	0.39	0.23	0.46
Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins	241-BF02 Pending Pending	0.01	6,400 6,400	Pending	Pending	0.92	0.55	1.10
Coal Mill	461-BF01 Pending Pending	0.01	54,500 43,600	Pending	Pending	12.37	3.74	14.73
Coke/Petroleum Coke (Transfer) Surge Bin (Feeder)	461-BF02 Pending Pending 461-BF03 Pending Pending	0.01 0.01	800 665 800 665	Pending Pending	Pending Pending	0.19 0.19	0.06 0.06	0.22 0.22
Total						14.06	4.64	16.73

Notes:

- All the above equipment except for 241-BF01 are subject to 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions of Particulate Matter from each of the baghouses on the coal handling system shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf). Assume PM-10 = 84% of PM for all baghouses.
  [Requested by Permittee in application received November 14, 2000.]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 461-BF01 serving the Coal Mill, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  [Rule 62-297.620(4), F.A.C.]

B.5 Coal Handling Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

	Baghouse Id. No.	Visible Emissions Limit	Rule Applicability
Dump Hopper (Transfer)	241.BF01	20%	Rule 62-296.320(4)(b)1, F.A.C.
Conveyors (2) Coal & Petroleum Coke Feed Bins (shared with conveyors)	241.BF02	20%	40 CFR 60, Subpart Y
Coal Mill Dust Collector	461.BF01	10%(*)	40 CFR 63.1345
Coke/Coal Surge Bins	461.BF02	20%	40 CFR 60, Subpart Y
	461.BF03	20%	40 CFR 60, Subpart Y

Note:

- (*) This emissions unit discharges to the common (main) stack. The Clinker Cooler which is limited to 10% opacity, discharges to the common (main) stack and therefore determines the opacity limit for this emissions unit.
  [40 CFR 63.1345]

EMISSIONS UNIT NO. 002 - CLINKER HANDLING & STORAGE SYSTEM

Operational Requirements

B.6 Hours of Operation: This emissions unit may not operate in excess of the following:

Baghouse ID No.	Hours Per Year
441.BF01	7,884
481.BF01	7,884
481.BF02	8,760
481.BF03	8,760

[Requested by permittee in application received November 14, 2000]

B.7 Clinker Handling & Storage Throughput Limits: The clinker handling and storage maximum hourly and annual throughput rates shall not exceed 320 TPH on a 24-hour block average or 1,942,500 TPY, respectively.
[Requested by Permittee in application Received November 14, 2000]

Emissions Limitations and Performance Standards

B.8 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the clinker handling and storage system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/dscf)	Flow Rate Acfm Dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	Potential PM Emissions (TPY)
Clinker Transfer Burner Building	441.BF01 Pending Pending	0.01	3,000 2,494	Pending	Pending	0.71	0.21	0.84
Clinker Silo	481.BF01 Pending Pending	0.01	10,000 8,315	Pending	Pending	2.36	0.71	2.81
Clinker Transfer	481.BF02 Pending Pending	0.01	3,000 2,494	Pending	Pending	0.79	0.21	0.94
Clinker Bins	481-BF03 Pending Pending	0.01	5,000 4,157	Pending	Pending	1.31	0.36	1.56
Total						5.17	1.50	6.15

Notes:

- All the above equipment are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Grain loading of 0.01 gr/dscf proposed permit limits for all the above baghouses and assume PM-10 = 84% of PM for all baghouses.
  [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  [Rule 62-297.620(4), F.A.C.]

B.9 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

	Baghouse Id. No.	Visible Emissions Limit	Rule Applicability
Clinker Transfer Burner Building	441.BF01	10%	40 CFR 63.1348
Clinker Silo	481.BF01	10%	40 CFR 63.1348
Clinker Transfer	481.BF02	10%	40 CFR 63.1348
Clinker Bins	481.BF03	10%	40 CFR 63.1348

EMISSIONS UNIT NO. 003 – FINISH MILLS

Operational Requirements

B.10 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year. [Requested by permittee in application received November 14, 2000]

B.11 Finish Mill Process Rates: The maximum total hourly process rate of cement is 334.0 TPH on a 24-hour block average. This is a total of the individual process rates listed below:

Finish Mill	Baghouse	Process Rate (TPH)
No. 3	F-313/F-330/F-332	84
No. 4	F-430/F-432/F-603/F-604/F-605	140
No. 6	531.BF01/531.BF02	110
Total		334

[Established by Permittee in application received November 14, 2000.]

Emissions Limitations and Performance Standards

B.12 Design Specifications and Particulate Matter Emissions Limits: The baghouses for the finish mills have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/acf)	Flow Rate acfm dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	(TPY)
Finish Mill No. 3	F-330 Norblo 702 AMT	0.01	20,000	9,477	2.1	6.31	1.71	7.51
Finish Mill No. 3	F-332 Norblo 390 AMT	0.01	13,500	5,465	2.5	4.26	1.16	5.07
Finish Mill No. 3	F-313 Mikropul 196S-10-20	0.01	8,000	2,300	3.5	2.52	0.69	3.00
Finish Mill No. 4 *Belt conveyor/ Separator*	F-432 Fuller 5 zone #48	0.01	17,000	2,510	6.8	5.36	1.46	6.38
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-605 Mikropul 645-10-30	0.01	4,000	753	5.3	1.26	0.34	1.50
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-603 Mikropul 121S-10-20	0.01	8,000	1,424	5.6	2.52	0.69	3.00
Finish Mill No. 4 *Ball Mill/Mill Sweep*	F-430 Fuller 6 zone #96	0.01	30,000	6,028	5.0	9.46	2.57	11.26
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-604 Mikropul 121S-10-20	0.01	8,000	1,424	5.6	2.52	0.69	3.00
Finish Mill No. 6 *Main*	531.BF01 Pending Pending	0.01 (dscf)	97,300 80,905	Pending	Pending	25.51	6.93	30.37
Finish Mill No. 6 *Sweep*	531.BF02 Pending Pending	0.01 (dscf)	25,900 21,536	Pending	Pending	6.79	1.85	8.09
Total						66.52	18.09	79.19

Notes:

- Finish Mill Nos. 3 & 6 Emission Limits of 0.01 gr/acf; lb/hr; were requested by Permittee in application received November 14, 2000.
- Initial testing to demonstrate compliance with the PM limits established above, shall be conducted only for units F-330, F-430, 531.BF01, and 531.BF02. All subsequent compliance testing for PM emissions from the emission points in the table above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
  - Emissions Limits for Finish Mill No. 4 are based on PSD-FL-236 dated July 1, 1998 and Permittee request in application received November 14, 2000.
  - Finish Mill Nos. 3 & 4 are existing systems. Finish Mill No. 6 is a new system.

B.13 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

	Baghouse Id. No.	Visible Emissions Limits	Rule Applicability
Finish Mill No. 3	F-313	10%	40 CFR 63.1347
	F-330		
	F-332		
Finish Mill No. 4	F-430	5%	PSD-FL-236
	F-432		
	F-603		
	F-604		
	F-605		
Finish Mill No. 6	531.BF01	10%	40 CFR 63.1347
	531.BF02		

EMISSIONS UNIT NO. 004 - CEMENT STORAGE/ PACKHOUSE/ LOADOUT

Operational Requirements

B.14 Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year, except for the packhouse which shall not exceed 4,000 hours of operation per year.
[Requested by permittee in application received November 14, 2000.]

B.15 Cement Storage Silos/Packhouse/Loadout Process and Production Design Specifications: The maximum process input rate to each cement silo and loadout operation is 500 TPH on a 24-hour block average. The maximum production rate of cement in the Packhouse is 85 TPH on a 24-hour block average .
[AC 13-21098 dated November 2, 1979]

Emissions Limitations and Performance Standards

B.16 Design Specifications and Particulate Matter Emissions Limits The baghouses for the Cement Storage/Packhouse/Loadout system have the following or equivalent design specifications. Particulate Matter emissions shall not exceed the amounts shown in the following table:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/acf)	Flow Rate Acfm Dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	(TPY)
Cement Silos 1-6	F-511 Fuller 2 zone #78	0.01	18,000	1,625	11.1	5.68	1.54	6.76
Cement Silos 7-9	F-512 Norblo 156 AMT	0.01	10,000	2,142	4.7	3.15	0.86	3.75
Cement Silo 10	F-513 Mikropul 121S-10-20B	0.01	5,000	1,424	3.5	1.58	0.43	1.88
Cement Silo 11	F-514 Mikropul 121S-10-20B	0.01	5,000	1,424	3.5	1.58	0.43	1.88
Cement Silo 12	F-515 Mikropul 121S-10-20B	0.01	5,000	1,424	3.5	1.58	0.43	1.88
Bulk Loadout Unit 1 (Rail/Truck)	B-110 Norblo 120 AMT	0.01	3,000	1,650	1.8	0.95	0.26	1.13
Bulk Loadout Unit 2 (Truck)	B-210 Norblo 120 AMT	0.01	3,000	1,650	1.8	0.95	0.26	1.13
Bulk Loadout Unit 3 Line 1	B-372 Mikropul 36S-8-30-C	0.01	2,000	340	5.9	0.63	0.17	0.75
Bulk Loadout Unit 3 Line 2	B-374 Mikropul 36S-8-30-C	0.01	2,000	340	5.9	0.63	0.17	0.75
Bulk Loadout Unit 3 Line 3	B-382 Mikropul 121S-10-20-B	0.01	5,000	1,424	3.5	1.58	0.43	1.88
Packhouse	Pending Pending Pending	0.01 (dscf)	23,400 23,400	Pending	Pending	3.37	2.01	4.01
Total						21.68	6.99	25.80

Notes:

- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. [Rule 62-297.620(4), F.A.C.]

Notes cont'd:

- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- Emissions reflect permit limits established in PSD-FL-028 dated March 19, 1980. [PSD-FL-028 dated March 19, 1980 and Requested by Permittee in application Received November 14, 2000]

B.17 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

	Baghouse Id. No.	Visible Emissions Limit	Rule Applicability
Cement Silos 1-6	F-511	10%	40 CFR 63.1348
Cement Silos 7-9	F-512	5%	PSD-FL-236
Cement Silos 10,11, 12	F-513	5%	AC13-21098
	F-514		
	F-515		
Bulk Loadout Unit 1	B-110	10%	PSD-FL-236
Bulk Loadout Unit 2	B-210	10%	PSD-FL-236
Bulk Loadout Unit 3 Line 1	B-372	5%	AC13-21098
Bulk Loadout Unit 3 Line 2	B-374	5%	AC13-21098
Bulk Loadout Unit 3 Line 3	B-382	5%	AC13-21098
Packhouse	Pending	10%	40 CFR 63.1348

EMISSIONS UNIT NO. 005 - RAW MILL/PYROPROCESSING SYSTEM

Operational Requirements

B.18 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year except for 341.BF01 which may operate 8760 hours per year.
[Requested by permittee in application received November 14, 2000]

B.19 Raw Mill/Pyroprocessing Unit Production Limits: The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 1,642,500 TPY.
[Rule 62-210.200 (228)(PTE), F.A.C.; and Application received November 14, 2000]

B.20 Operating Limits for In-line kiln/raw mills:

(a) The owner or operator of a in-line kiln/raw mill subject to a D/F emissions limitation under 40 CFR 63.1343 must operate the in-line kiln/raw mill such that the temperature of the gas at the inlet to the kiln Particulate Matter control device (PMCD) does not exceed the applicable temperature limit specified in the following paragraph.

(b) The temperature limit for affected sources meeting the limits above is determined in accordance with the following: the run average temperature must be calculated for each run, and the average of the run average temperature must be determined and included in the performance test report and will determine the applicable temperature limit.

(c) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.

(1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).

(2) The owner or operator shall either:

(i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c) of this part, or

(ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).

(d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the site-specific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.

(e) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.

[40 CFR 63.1344]

B.21 Methods of Operation – Fuels:

	Allowable Fuels
RawMill and Pyroprecessing Unit	Natural Gas, Bituminous Coal, Petroleum Coke, No. 2 Fuel Oil with used oil blend and No. 6 Fuel Oil with used oil blend. Fuel oil includes on-spec used oil.*

Note:

- (*)"On-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

Constituent/Property	Allowable Level
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	4000 ppm maximum
Flash Point	100°F minimum

As determined by approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

Emissions Limitations and Performance Standards

B.22 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Mill/Pyroprocessing system are controlled by baghouses with the following or equivalent design specifications. Particulate Matter emissions shall not exceed the limits shown in the following table:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/dscf)	Flow Rate Acfm Dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	(TPY)
Kiln/Cooler/ Raw Mill *Main Stack*	331.BF01 Pending Pending	*	486,000 392,367	Pending	Pending	147.00	53.10	175.00
Dust Bin *Kiln Dust*	331.BF02 Pending Pending	0.01	6,800 4,175	Pending	Pending	1.18	0.36	1.41
Blend Silo	341.BF01 Pending Pending	0.01	6,250 5,189	Pending	Pending	1.64	0.44	1.95
Raw Meal *Preheat Tower*	351.BF01 Pending Pending	0.01	6,200 5,147	Pending	Pending	1.46	0.44	1.74
Raw Meal *Preheat Tower*	351.BF02 Pending Pending	0.01	3,000 2,491	Pending	Pending	0.71	0.21	0.84
Raw Meal *Preheat Tower*	351-BF03 Pending Pending	0.01	10,400 8,634	Pending	Pending	2.45	0.74	2.92
Total						154.44	55.29	183.86

Notes:

- (*) PM Emissions Limit is 0.125 lbs/ton of kiln feed.
- Grain loading of 0.01 gr/dscf proposed permit limits for all new baghouses except main stack and assume PM-10 = 84% of PM for all baghouses
  [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above, except 331.BF01 which exhausts to the main/common stack, are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  [Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.
- All the above units are subject to 40 CFR 63 Subpart LLL, NESHAPS for Portland Cement Manufacturing Industry.

B.23 SO_2, NO_x, CO, VOC, and SAM Emission Limits: The emissions from the Raw Mill/Pyroprocessing system shall not exceed the limits shown in the following table:

Pollutant	Allowable Emissions		Emissions Limits in lbs./ton of clinker		Monitors
	12-month rolling average in TPY	Lbs./hr 24-hr average	24 hr avg. @208 TPH of clinker production (5)	24-hr average @250 TPH of clinker production	
SO_2	806	320	1.54	1.28	CEM
NO_x	1953	720	3.46	2.88	CEM
CO	1457	576	2.76	2.30	Process
VOC	155	40	0.19	0.16	CEM
SAM	8.68	2.24	0.009	0.009	-

Notes:

- The 12-month rolling average in TPY would be the average of the daily values for the current month and the preceding 11 months. The averages shall be based on the operating days or hours, and shall exclude days or hours in which the plant is not operating.
- The averaging time for CO corresponds to the required length of sampling for the initial and subsequent emission tests.

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

B.24 PM/PM-10 and Dioxins/Furans Emissions:

Pollutant	Allowable Emissions		Emissions		
	TPY	lbs./hr	Limit	Unit	Averaging Time
PM	175	53.1	0.125	lbs./ton of dry kiln feed	3 hours
PM_{10}	147	42.0	0.105	lbs./ton of dry kiln feed	3 hours
Dioxins/ Furans			0.40	ng TEQ/dscm	3 hours

Notes:

- The averaging times for PM and PM10 correspond to the required length of sampling for the initial and subsequent emissions tests.

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

B.25 Sulfur Dioxide Emissions: Emissions of SO_2 shall not exceed 1.2 lb/MMBtu heat input when solid fuel is fired, or 0.8 lb/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.
[Miami-Dade County Code, Section 24-17(2)(a)]

B.26 Mercury and Lead into the Pyroprocessing System Limited: The baseline potential emissions for mercury and lead, as stated in the Application received June 30, 1998, are 30 lbs/year and 94 lbs/year, respectively. An increase in mercury and lead emissions of 200 and 1,200 pounds, respectively, above the previously stated baseline emissions per consecutive 12-month period shall subject this facility to Prevention of Significant Deterioration (PSD) Review.
[Rules 62-4.070(3) and 62-212.400, F.A.C.]

B.27 Pursuant to 40 CFR 63.1343 Standards for Kilns and In-line Kiln/raw Mills
(a) *General.* The provisions in this section apply to each in-line kiln/raw mill.
(c) No owner or operator of an inline kiln/raw mill shall cause to be discharged into the atmosphere from these affected sources any gases which:
(1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.
(2) Exhibit opacity greater than 20 percent.
(3) Contain D/F in excess of:
(i) 0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to seven percent oxygen; or
(ii) 0.40 ng per dscm (1.7×10^{-10} gr per dscf)(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204□ C (400□ F) or less.
[40 CFR 63.1343]

B.28 Engineering Design Capacities For The Raw Mill And Pyroprocessing Unit:

Sources	Maximum Capacity (MMBtu/hr)
Raw Mill Heat Input	105
Calciner Heat Input	385
Kiln Heat Input	290
Total Heat Input	675

[Application received November 14, 2000]

B.29 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

Emissions Point	Baghouse Id. No.	Visible Emissions Limit	Permit/Rule Applicability
Main Dust Collector exhausts to Main/Common Stack	331.BF01	10%*	40 CFR 63.1342
Cement Kiln Dust Bin	331.BF02	10%	40 CFR 63.1348
Blending & Storage System	341.BF01	10%	40 CFR 63.1348
	351.BF01	10%	40 CFR 63.1348
	351.BF02	10%	40 CFR 63.1348
	351.BF03	10%	40 CFR 63.1348

Note:

- (*) This emissions unit discharges to the common (main) stack. The Clinker Cooler which is limited to 10% opacity, discharges to the common (main) stack and therefore determines the opacity limit for this emissions unit.
  [40 CFR 63.1345]

EMISSIONS UNIT NO. 006 - RAW MATERIAL HANDLING

Operational Requirements

B.30 Hours of Operation: This emissions unit may not operate in excess of 7,884 hours per year, except for baghouse 232.BF01 for the lime/gypsum silos (existing silos) which shall not exceed 4,000 hours of operation per year.
[Requested by permittee in application received November 14, 2000]

B.31 Raw Material Handling System Throughput Specification: The maximum dry throughput rate is shown in the following table:

Source Description	Throughput Maximum (TPY)
Raw Material Handling System	3,260,000 (dry)

Emissions Limitations and Performance Standards

B.32 Design Specifications and Particulate Matter Emissions Limits: The Particulate Matter emissions from the Raw Material Handling system are controlled by baghouses with the following or equivalent design specifications:

System	Baghouse ID Manufacturer Model No.	Grain Loading (gr/dscf)	Flow Rate Acfm Dscfm	Cloth Area (ft^2)	Air to Cloth Ratio	Potential PM-10 Emissions (TPY)	Potential PM Emissions (lb/hr)	(TPY)
Lime/Gyp Silos	232.BF01 Pending Pending	0.01	5,170 5,170	Pending	Pending	0.74	0.44	0.89
Additives	311.BF01 Pending Pending	0.01	11,000 11,000	Pending	Pending	3.12	0.94	3.72
Additives	311.BF02 Pending Pending	0.01	6,050 4,840	Pending	Pending	1.37	0.41	1.64
Additives	311.BF03 Pending Pending	0.01	10,000 10,000	Pending	Pending	2.84	0.86	3.38
Additives	311.BF04 Pending Pending	0.01	10,000 10,000	Pending	Pending	2.84	0.86	3.38
Total						10.91	3.51	13.01

Notes:

- Grain loading of 0.01 gr/dscf proposed permit limits for all baghouses listed above and assume PM-10 = 84% of PM.
  [Requested by Permittee in application Received November 14, 2000]
- Initial and annual compliance testing requirements for PM emissions from all emissions points listed above are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the DERM has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  [Rule 62-297.620(4), F.A.C.]
- The pending information listed in this table will be submitted to the DERM Air Facilities Section at the time of applying for the required building permits for the construction of the emissions units regulated in this permit.

B.33 Visible Emissions Limits: The baghouses listed below shall not equal or exceed the following visible emissions limits:

	Baghouse Id. No.	**Visible Emissions Limit**	**Rule Applicability**
Lime/Gyp Silos	232.BF01	10%	40 CFR 63.1348
Additives	311.BF01		
Additives	311.BF02		
Additives	311.BF03		
Additives	311.BF04		

C.0 Emissions Unit Specific Testing, Monitoring, Notification, Recordkeeping, and Reporting Requirements

C.1 Test Methods and Procedures: The permittee shall conduct testing/monitoring on all emissions units as indicated below:

System	Unit ID	Pollutant	EPA Test Method	Frequency
EU-001 Coal Handling				
Coal Main – exhausts to main stack	461.BF01	PM Opacity	5 9	Initial & Annual Initial & 5 years
Dump Hopper (Transfer)	241.BF01	PM Opacity	5 9	Initial & Annual Initial & Annual
Conveyors (2) (Transfer) & Coal and Petroleum Coke Feed Bins	241.BF02			
Coke/Petroleum Coke (Transfer) Surge Bin (Feeder)	461.BF02 461.BF03			
EU-002 Clinker Handling & Storage				
Clinker Transfer Burner Building	441.BF01	PM Opacity	5 9	Initial & Annual Initial & 5 years
Clinker Silo	481.BF01			
Clinker Transfer	481.BF02			
Clinker Bins	481.BF03			
EU-003 Finish Mills				
Finish Mill No. 3	F-330 F-332 F-313	PM Opacity	5 9	Initial & Annual Initial & 5 years
Finish Mill No. 4 *Belt conveyor/ Separator*	F-432			
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-605			
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-603			
Finish Mill No. 4 *Ball Mill/Mill Sweep*	F-430			
Finish Mill No. 4 *Clinker/Gypsum Conveyor*	F-604			
Finish Mill No. 6 *Main*	531.BF01	PM Opacity	5 9	Initial & Annual Initial & Annual
Finish Mill No. 6 *Sweep*	531.BF02			
EU-004 Cement Storage, Packhouse, & Loadout				
Cement Silos 1-6	F-511	PM Opacity	5 9	Initial & Annual Initial & 5 years
Cement Silos 7-9	F-512			
Cement Silo 10	F-513			
Cement Silo 11	F-514			
Cement Silo 12	F-515			
Bulk Loadout Unit 1 (Rail/Truck)	B-110			

Bulk Loadout Unit 2 (Truck)	B-210	PM Opacity	5 9	Initial & Annual Initial & 5 years
Bulk Loadout Unit 3 Line 1	B-372			
Bulk Loadout Unit 3 Line 2	B-374			
Bulk Loadout Unit 3 Line 3	B-382			
Packhouse	Pending			
FG 005 Raw Mill and Preprocessing System				
Kiln/Cooler/Raw Mill *Main/Common Stack*	331.BF01	PM PM10 Opacity SO2 NOx CO VOC SAM Dioxins/Fuans Lead/Mercury	5 5 9 6 7 or 7E 10 25 or 25A 5 & 8 23 29 or 101A	Initial & Annual Initial & Annual Initial & 5 years Initial & 5 years Initial & 5 years Initial & 5 years Initial & 5 years Initial & 5 years Initial & 30 months Initial & Annual
Dust Bin Kiln Dust	331.BF02	PM Opacity	5 9	Initial & Annual Initial & 5 years
Blend Silo	341.BF01			
Raw Meal Preheat Tower	351.BF01			
Raw Meal Preheat Tower	351.BF02			
Raw Meal Preheat Tower	351.BF03			
FG 006 Raw Material Handling				
Lime/Gyp Silos	232.BF01	PM Opacity	5 9	Initial & Annual Initial & 5 years
Additives	311.BF01			
Additives	311.BF02			
Additives	311.BF03			
Additives	311.BF04			

Notes:

- In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the annual testing and require testing once every 5 years. Should subsequent test results indicate levels greater than those mentioned above, the facility shall revert to an annual testing schedule.
- Initial and subsequent compliance testing requirements for PM emissions, except those listed below, are waived and an alternative standard of 5% opacity is imposed. If the DERM has reason to believe that the particulate weight emissions standard is not being met, it shall require that compliance be demonstrated using EPA Method 5.
  The following emissions units require initial testing for PM emissions:
  331.BF01, F-330, F-430, 531.BF01, 531.BF02

C.2 Lead/Mercury Testing: Initial and Annual tests of emissions shall be conducted for mercury and lead using either Method 29 or Method 101A. In the event that initial testing for mercury and lead result in potential annual emissions below 130 and 694 pounds, respectively, the DERM may waive the subsequent annual testing requirements.
[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

C.3 Initial and Subsequent Performance Testing:

(a) The owner or operator of an affected emissions unit subject to 40 CFR 63, Subpart LLL, shall demonstrate initial compliance with the emissions limits of 40 CFR 63.1343, 40 CFR 63.1345, 40 CFR 63.1346, 40 CFR 63.1347 and 40 CFR 63.1348 using the test methods and procedures in paragraph 40 CFR 63.1349(b) (see Specific condition C.1 and 40 CFR 63.7). Performance test results shall be documented in complete test reports that contain the information required by paragraphs 40 CFR 63.1349(a)(1) through (a)(10), as described below, as well as all other relevant information. The plan to be followed during testing shall be made available to the DERM prior to testing, if requested.
  (1) A brief description of the process and the air pollution control system;
  (2) Sampling location description(s);
  (3) A description of sampling and analytical procedures and any modifications to standard procedures;
  (4) Test results;
  (5) Quality assurance procedures and results;
  (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
  (7) Raw data sheets for field sampling and field and laboratory analyses;
  (8) Documentation of calculations;
  (9) All data recorded and used to establish parameters for compliance monitoring; and
  (10) Any other information required by the test method.

(b) Performance tests to demonstrate initial compliance with 40 CFR 63, Subpart LLL, shall be conducted as specified as follows: [40 CFR 63.1349(b)(1) through (b)(3)].
  (1) The owner or operator of a in-line kiln/raw mill subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs 40 CFR 63.1349(b)(1)(i) through (b)(1)(iii). The owner or operator of a clinker cooler subject to limitations on Particulate Matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii). The opacity exhibited during the period of the Method 5 of Appendix A, 40 CFR Part 60 performance tests required by paragraph (b)(1)(i) shall be determined as required in paragraph (b)(1)(v).
  (i) EPA Method 5 of Appendix A, 40 CFR Part 60, shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be used to determine compliance. A determination of the Particulate Matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of 40 CFR 63, Subpart LLL. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.
  (ii) Suitable methods shall be used to determine the kiln feed rate, except for fuels, for each run.
  (iii) The emissions rate, E, of PM shall be computed for each run using Equation 1:

$$E = (c_s Q_{sd}) / P \qquad \textbf{(Equation 1)}$$

Where: E = emissions rate of Particulate Matter, kg/Mg (lb/ton) of kiln feed.
c_s = concentration of PM, kg/dscm (g/dscf).
Q_{sd} = volumetric flow rate of effluent gas, dscm/hr.
P = total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph 40 CFR 63.1349(b)(1)(vi) the opacity exhibited during the period of the Method 5 performance tests required by paragraph 40 CFR 63.1349(b)(1)(i) shall be determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of 40 CFR 63.1343(b)(2) or 40 CFR 63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under 40 CFR 63, Subpart LLL, that is not subject to (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of Appendix A, 40 CFR Part 60. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.5). The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3-hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1-hour if the conditions of paragraphs (b)(2)(i) through (ii) of the section apply:

(i) There are no individual readings greater than 10 percent opacity;

(ii) There are no more than three readings of 10 percent for the first 1-hour period. (See Specific Condition C.4).

(3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emissions limit by conducting a performance test using Method 23 of Appendix A, 40 CFR Part 60.

(i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur (See Specific Condition C.4 and C.5). The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.

(ii) The temperature at the inlet to the PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s) must be included in the performance test report.

(iii) One-minute average temperatures must be calculated for each minute of each run of the test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with Specific Condition C.13.

(c) Except as provided in paragraph 40 CFR 63.1349(e), performance tests required under paragraphs 40 CFR 63.1349(b)(1) and (b)(2) shall be repeated annually.

(d) Performance tests required under paragraph 40 CFR 63.1349(b)(3) shall be repeated every 30 months.

(e) The owner or operator is required to repeat the performance tests for in-line kiln/raw mills as specified in paragraphs 40 CFR 63.1349(b)(1) and (b)(3) within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.

[Rules 62-204.800 and 62-297.310(7)(a)4., F.A.C.; and, 40 CFR 63.1349(a); (b)(1)(i), (ii), (iii) & (v); (b)(2); (b)(3)(i), (ii), (iii) & (iv); (c); (d); and, (e)]

C.4 Required Number of Test Runs: For mass emissions limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emissions 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 emissions 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 emissions 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 the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emissions limiting standards.
[Rule 62-297.310(1), F.A.C.]

C.5 Operating Rate During Testing: Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions 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.

Emissions testing shall be performed at the kiln/cooler main stack during a period when the kiln precalciner, cooler, raw mill and preheater are operating simultaneously and under normal operating conditions. EPA-reference methods for sampling pollutants shall be as specified in 40 CFR 63, Appendix A. These emissions units shall comply with all applicable requirements of Rule 62297.310, F.A.C. General Test Requirements and 40 CFR 63.1349, Performance Tests.

The permittee shall provide the DERM with a *protocol* that will outline the different fuel scenarios (% of total heat input) that this unit will be burning. Tarmac shall obtain the test data necessary to determine whether this kiln is capable of accommodating the burning of coal or petroleum coke and all of the other supplemental fuels specified on Specific Condition B.21 Methods of Operation - Fuels. The fuel scenarios tested shall represent the actual combustion percentage (% of total heat input) that is going to be maintained while burning supplemental fuels during normal operation. The frequency of testing shall be determined by the DERM.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

C.6 Calculation of Emissions Rate: The indicated emissions rate or concentration shall be the arithmetic average of the emissions rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

C.7 Applicable Test Procedures:

(a) Required Sampling Time:

1. 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.
2. Opacity Compliance Tests. When EPA Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of Particulate Matter, and thirty (30) minutes for emissions units which have potential emissions

less than 100 tons per year of Particulate Matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the DERM to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume: Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range: For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (attached).

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

C.8 Required Stack Sampling Facilities: When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

C.9 Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing:

1. The owner or operator of an emissions unit that is subject to any emissions limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emissions limiting standard prior to obtaining a Title V operating permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the DERM shall not require submission of emissions compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
2. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; or 100 tons per year or more of any other regulated air pollutant; and,
   c. Each NESHAP pollutant, if there is an applicable emissions standard.
3. The owner or operator shall notify the DERM, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests: When the DERM, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to

believe that any applicable emissions standard contained in a DERM rule or in a permit issued pursuant to those rules is being violated, it may 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 DERM.

(c) Waiver of Compliance Test Requirements: If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the DERM, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emissions limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for Particulate Matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the DERM shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; 40 CFR 63.1349(c)]

C.10 Fuel Analysis for On-specification Used Oil: Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday - Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established with the DERM, Miami-Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

Constituent/Property	Unit	Test Method
Arsenic	ppm	EPA SW-846 (3040-7130)
Cadmium	ppm	EPA SW-846 (3040-7130)
Chromium	ppm	EPA SW-846 (3040-7130)
Lead	ppm	EPA SW-846 (3040-7130)
Total Halogens	ppm	ASTM E442
Sulfur	% by weight	ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 & ASTM D129-91
Flash Point	°F	ASTM D93
Heat of Combustion	Btu/gal	ASTM D240-76
Density	Lbs/gal	ASTM D1298-80

Note:

- Other test methods may be used only after receiving written approval from the DERM. [40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

Monitoring of Operations

C.11 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 emissions 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.]

C.12 Production Rate Recording: The owner or operator shall record the daily production and the preheater-kiln system feed rate. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%.

[Rule 62-204.800(7)(b)9., F.A.C.]

C.13 Maintenance Plans:

(a) The owner or operator of each Portland cement plant shall prepare for each affected emissions unit subject to the provisions of 40 CFR 63, Subpart LLL, a written operations and maintenance plan. The plan shall be submitted to the DERM for review and approval as part of the application for a 40 CFR Part 70 permit and shall include the following information:

(1) Procedures for proper operation and maintenance of the affected emissions unit and air pollution control devices in order to meet the emissions limits and operating limits of 40 CFR 63.1343 through 40 CFR 63.1348;

(2) Corrective actions to be taken when required by paragraph 40 CFR 63.1350(e);

(3) Procedures to be used during an inspection of the components of the combustion system of each in-line kiln/raw mill located at the facility at least once per year; and

(4) Procedures to be used to periodically monitor existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer. Emissions from these units shall not exceed the 10 percent opacity standard pursuant to 40 CFR 63.1348. Such procedures must include the provisions of paragraphs 40 CFR 63.1350(a)(4)(i) through (a)(4)(iv).

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected emissions unit in accordance with Method 22 of Appendix A, 40 CFR Part 60. The test must be conducted while the affected emissions unit is in operation.

(ii) If no visible emissions are observed in six consecutive monthly tests for any affected emissions unit, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected emissions unit. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iii) If no visible emissions are observed during the semi-annual test for any affected emissions unit, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected emissions unit. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected emissions unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

(iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A, 40 CFR Part 60. The Method 9 test must begin within one hour of any observation of visible emissions.

(b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph 40 CFR 63.1350(a) shall be a violation of the standard.

(c) The owner or operator of a in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources in accordance with paragraphs 40 CFR 63.1350(c)(1) and (c)(3).

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of this 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.

(2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.

(d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs 40 CFR 63.1350(d)(1) and (d)(3).

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of 40 CFR Part 63, and according to PS-1 of Appendix B, 40 CFR Part 60.

(2) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.

(f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs 40 CFR 63.1350(f)(1) through (f)(6).

(1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln at the inlet to, or upstream of, the kiln PM control devices.

(i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).

(ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the DERM.

(2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln at the inlet to the kiln PMCD.

(3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.

(4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.

(5) When the operating status of the raw mill of the in line kiln/raw mill is changed from off to on, or from on to off the calculation of the three hour rolling average temperature must begin anew, without considering previous recordings.

(6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

(g) The owner or operator of any in-line kiln/raw mill subject to a D/F emissions limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln at least once per year.

(h) The owner or operator of an affected source subject to a Particulate Matter standard under 40 CFR 63.1343 shall install, calibrate, maintain and operate a Particulate Matter continuous emissions monitoring system (PM CEMS) to measure the Particulate Matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(a)(1), (2)&(3); (b); (c)(1)&(3); (d)(1) & (3); (f); (i); & (k)]

C.14 Raw Mill and Finish Mill Monitoring: The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs (PM control devices) of these affected sources, in accordance with the procedures of Method 22 of Appendix A, 40 CFR Part 60. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

(1) Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with paragraphs 40 CFR 63.1350(a)(1) and (a)(2); and

(2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed in accordance with Method 9 of Appendix A, 40 CFR Part 60. The duration of the Method 9 test shall be thirty minutes.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1350(e)]

C.15 Continuous Opacity Monitor (COM): The owner or operator of an affected source subject to a limitation on opacity under 40 CFR 63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed pursuant to paragraph 40 CFR 63.1350(a).
[Rule 62-206.800, F.A.C.; and, 40 CFR 63.1350(j)]

C.16 CO/O_2 Process Monitors: Continuous process monitors shall be installed for CO or O_2 to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO_2.
[Rule 62-4.070(3) F.A.C.]

C.17 NO_x, SO_2 & VOC Continuous Emissions Monitor System (CEMS): CEMS shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_x, SO_2 and VOCs. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 63 Subpart A General Provisions.
[Rules 62-4.070 (3) and 62-204.800, F.A.C.]

C.18 CMS Requirements:
Each CEMS shall calculate and record emissions rates in units of pounds of NO_x, SO_2, and VOCs per hour. The averaging time for each CEMS shall be a 24-hour block average for the lb/hour short-term emissions limits. Every day, the 24-hour average NO_x, SO_2 and VOC emissions rates for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two

emissions measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average. To the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.
[Rule 62-4.070(3), F.A.C.]

C.19 CMS Certification: The monitoring device shall meet the applicable requirements of 40 CFR 63, Appendix A General Provisions including certification of each device in accordance with Performance Specifications in 40 CFR 63.8 and Notification Requirements in 40 CFR 63.9. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirements, and the proposed location of each monitor shall be provided to the DERM for review at least 45 days prior to replacement of a any CMS.
[40 CFR 63 Subpart A, General Provisions, Rule 62-4.070 (3) F.A.C., Rule 62-204.800 F.A.C.]

Notification, Recordkeeping and Reporting Requirements

C.20 On-specification Used Oil:
(a) The results of each sample analysis shall be submitted to the DERM within 30-days after the sample is taken.
(b) The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the in-line kiln/raw mill's storage tank shall be reported quarterly (i.e., Jan.-Mar., April-June, July-Sept., and Oct.-Dec.) to the DERM and due during the month following the ending quarter.
[40 CFR 279.11, which is adopted by reference in Rule 62-710.210(2), F.A.C.]

C.21 Notification requirements:
(a) The notification provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a notice that contains all of the information required in a notification listed in 40 CFR 63.1353, the owner or operator may send the DERM a copy of the notice sent to the State to satisfy the requirements of 40 CFR 63.1353 for that notification.
(b) Each owner or operator subject to the requirements of 40 CFR 63, Subpart LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:
(1) Initial notifications as required by 40 CFR 63.9(b) through (d). For the purposes of 40 CFR 63, Subpart LLL, a Title V or 40 CFR Part 70 permit application may be used in lieu of the initial notification required under 40 CFR 63.9(b), provided the same information is contained in the permit application as required by 40 CFR 63.9(b), and the State to which the permit application has been submitted has an approved operating permit program under 40 CFR Part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.
(2) Notification of performance tests, as required by 40 CFR 63.7 and 63.9(e).
(3) Notification of opacity and visible emissions observations required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 63.9(f).
(4) Notification, as required by 40 CFR 63.9(g), of the date that the continuous emissions monitor performance evaluation required by 40 CFR 63.8(e) of this part is scheduled to begin.
(5) Notification of compliance status, as required by 40 CFR 63.9(h).
[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1353]

C.22 Used Oil Usage Records: In order to document compliance with the used oil limitations, the following requirements shall be adhered to as a minimum:

(1) Recordkeeping when burning used oil shall be in accordance with applicable provisions of 40 CFR 279, Subpart B and Subpart G (July 1, 1996 version), Standards For The Management of Used Oil and Chapter 62-710, F.A.C.

(2) The following shall be recorded on the delivery receipt:

- the use of tamper-proof seals on the delivery receipt
- the volume of fuel delivery
- a cross reference to the analysis which establishes that the used oil meets EPA used oil fuel specifications
- the results of the screening analysis
- the name of the person performing the test
- the specific test kit used
- the amount of oil sampled
- the amount and name of the solution used to dilute the oil

(3) The following procedures shall be implemented:

- On and off specification used oil that is delivered without a delivery receipt containing all the above information, or which is not properly sealed, or for which the delivery receipt does not contain all the necessary information, is not to be accepted and the DERM is to be notified by phone immediately (with written confirmation to follow), if such a delivery is attempted.
- Verification by signature on the delivery receipt shall be provided by plant personnel that the delivery truck arrived on site with all seals intact. As delivered samples of all used oil fuel received shall be accumulated through each quarter for each supplier.
- The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the DERM within 30 days after a sample is taken and analyzed.
- The dates and quantities of both on and off-spec purchased used oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter.
- The unused portion of the used oil sample shall be retained for six months following the submittal of the analyses in case further testing is required.

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

C.23 Reporting requirements:

(a) The reporting provisions of 40 CFR 63, Subpart A, are contained in Appendix 40 CFR 63, Subpart A, and are applicable. If any State requires a report that contains all of the information required in a report listed in 40 CFR 63.1354, the owner or operator may send the DERM a copy of the report sent to the State to satisfy the requirements of 40 CFR 63.1354 for that report.

(b) The owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 of the general provisions of 40 CFR Part 63, Subpart A, as follows:

(1) As required by 40 CFR 63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.

(2) As required by 40 CFR 63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by 40 CFR 63.1349.

(3) As required by 40 CFR 63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance

under 40 CFR 63.6(i) shall submit such reports by the dates specified in the written extension of compliance.

(4) As required by 40 CFR 63.10(d)(5), if actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

(5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

(6) As required by 40 CFR 63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by 40 CFR 63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.

(7) As required by 40 CFR 63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under 40 CFR 63.7 and described in 40 CFR 63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under 40 CFR 63.8(e).

(8) As required by 40 CFR 63.10(e)(3), the owner or operator of an affected source equipped with a continuous monitoring system shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emissions limitation or operating parameter limit.

(9) The owner or operator shall submit a summary report **semiannually** which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

  (i) All exceedances of maximum control device inlet gas temperature limits specified in 40 CFR 63.1344(a) and (b);

  (ii) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7) of 40 CFR 63, Subpart LLL; and

  (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under 40 CFR 63.1344(c).

  (iv) The results of any combustion system component inspections conducted within the reporting period as required under 40 CFR 63.1350(i).

  (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

(10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1354(a) and (b)(1) through (10)]

C.24 Record keeping requirements:

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355 recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche.

(b) The owner or operator shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (b)(3); and

(1) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9;

(2) All records of applicability determination, including supporting analyses; and

(3) If the owner or operator has been granted a waiver under 40 CFR 63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of record keeping or reporting requirements.

[Rules 62-204.800 and 62-213.440, F.A.C.; and, 40 CFR 63.1355(a) and (b)]

C.25 Test Reports:

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DERM on the results of each such test.

(b) The required test report shall be filed with the DERM as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DERM 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 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 emissions 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 emissions rate.
20. The applicable emissions standard, and the resulting maximum allowable emissions 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 DERM 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.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Miscellaneous

C.26 Delegation of Authority:

(a) In delegating implementation and enforcement authority to a State under Subpart E of 40 CFR Part 63, the authorities contained in paragraph 40 CFR 63.1358(b) shall be retained by the Administrator and not transferred to a State.

(b) Authority which will not be delegated to States:

(1) Approval of alternative non-opacity emissions standards under 40 CFR 63.6(g).

(2) Approval of alternative opacity standards under 40 CFR 63.6(h)(9).

(3) Approval of major changes to test methods under 40 CFR 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally enforceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).

(4) Approval of major changes to monitoring under 40 CFR 63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.

(5) Waiver of record-keeping under 40 CFR 63.10(f)

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1358(a) and (b)]

Executed in Miami-Dade County, Florida.

DEPARTMENT OF ENVIRONMENTAL
RESOURCES MANAGEMENT

H. Patrick Wong 5/1/2001

H. Patrick Wong, Chief — Date
Air Quality Management Division

PW/mg

Copy: Isidore Goldman, P.E., Florida Department of Environmental Protection, West Palm Beach
Stephanie S. Brooks, PE, Brooks & Associates Inc., 5068 NW 85 Road, Coral Springs, FL 33067

FILING AND ACKNOWLEDGMENT: FILED, on this date, pursuant to § 120.52(7), F.S., with the designated DERM Clerk, receipt of which is hereby acknowledged.

Clerk — Date 5/1/2001

Attachment A

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to **Sections 403.141, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.).** The permittee is placed on notice that the DERM 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 DERM.

3. As provided in **Subsections 403.087(6) and 403.722(5), F.S.**, the issuance of this permit does not convey any 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 of or approval of any other DERM 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 the DERM rules, unless specifically authorized by an order from the DERM.

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 the DERM 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 the DERM rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized DERM personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

   (a) Have access to and copy any 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 the DERM 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 the permit, the permittee shall immediately notify and provide the DERM with the following information:

   (a) A description of and cause of noncompliance; and

GENERAL CONDITIONS CONTINUED:

(b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the DERM 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 DERM, may be used by the DERM as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or the DERM rules, except where such use is prescribed by **Sections 403.111 and 403.73, F.S.** 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 the DERM 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 the DERM rules.

11. This permit is transferable only upon the DERM approval in accordance with **Rule 62-4.120 and 62-30.300, Florida Administrative Code (F.A.C.)**, as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the DERM.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. The permittee shall comply with the following :

(a) Upon request, the permittee shall furnish all records and plans required under the DERM rules. During enforcement actions, the retention period for all records will be extended automatically, unless otherwise stipulated by the DERM.

(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 for 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 the DERM rule.

(c) Records of monitoring information shall include:

the date, exact place, and time of sampling or measurements;
the person responsible for performing the sampling or measurements;
the date(s) analyses were performed;
the person responsible for performing the analyses;
the analytical techniques or methods used; and
the results of such analyses.

14. When requested by the DERM, 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 the relevant facts were not submitted or were incorrect in the permit application or in any report to the DERM, such facts or information shall be submitted or corrected promptly.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

TABLE 297.310-1 CALIBRATION SCHEDULE
(version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%
	3. Check after each test series	Comparison check	5%

[electronic file name: 297310-1.doc]

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission data summary [1]	**CMS performance summary** [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown ..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ..... ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes ..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes ..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ..... ____ % [2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ % [2]

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

0250020 -010-AC

RECEIVED
NOV 14 2000
Air Quality Management Division

Department of Environmental Protection

DIVISION OF AIR RESOURCES MANAGEMENT

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility Addressed in This Application

1. Facility Owner/Company Name : TARMAC AMERICA INC	
2. Site Name : TARMAC-PENNSUCO CEMENT	
3. Facility Identification Number : 0250020	[ ] Unknown
4. Facility Location :	
Street Address or Other Locator : 11000 NW 121 WAY	
City : Medley County : DADE	Zip Code : 33178
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official :

Name : Hardy Johnson
Title : President, Florida Division

2. Owner or Authorized Representative or Responsible Official Mailing Address :

Organization/Firm : Tarmac America, Inc.
Street Address : 455 Fairway Drive
City : Deerfield Beach
State : FL Zip Code : 33441

3. Owner/Authorized Representative or Responsible Official Telephone Numbers :

Telephone : (954)481-2800 Fax : (954)421-0296

4. Owner/Authorized Representative or Responsible Official Statement :

I, the undersigned, am the owner or authorized representative of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions units.*

Signature

NOV 14 2000
Date

* Attach letter of authorization if not currently on file.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type
001	COAL HANDLING SYSTEM	ACM1
002	CLINKER HANDLING &STORAGE SYSTEM	ACM1
003	FINISH MILLS #3, 4, & 6	ACM1
004	CEMENT STORAGE, PACKHOUSE AND LOADOUT	ACM1
005	RAW MILL AND PYROPROCESSING UNIT	ACM1
No Id	RAW MATERIAL HANDLING	ACM1

Purpose of Application and Category

ategory I : All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, .A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.

[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number :

[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a Title V source to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number :

Operation permit to be revised :

[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.

Operation permit to be revised/corrected :

[ ] Air operation permit revision for a Title V source for reasons other than construction or modification of an emissions unit.

Operation permit to be revised :

Reason for revision :

ategory II : All Air Operation Permit Applications Subject to Processing Under Rule 2-210.300(2)(b), F.A.C.

This Application for Air Permit is submitted to obtain :

[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s) :

[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A.C., for a synthetic non-Title V source.

Operation permit to be renewed :

[ ] Air operation permit revision for a synthetic non-Title V source.

Operation permit to be revised :

Reason for revision :

Category III : All Air Construction Permit Applications for All Facilities and Emissions Units

This Application for Air Permit is submitted to obtain :

[X] Air construction permit to construct or modify one or more emissions units within a facility (including any facility classified as a Title V source).

Current operation permit number(s), if any :
0250020-002-AV

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s) :

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Application Processing Fee

Check one :

[X] Attached - Amount : $5000.00 [ ] Not Applicable.

Construction/Modification Information

1. Description of Proposed Project or Alterations :

   Project involves the modification of current permit 0250020-008-AC (10/21/99) to construct a new preheater/calciner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system. A ne finish mill will be constructed and existing finish mills 1 and 2 will be shut down. Production capacity w be increased but production, operating hour, and emission limits are being requested that will maintain th total allowed emissions at or below the emissions allowed by the October 21, 1999 permit (see Attachme B).

2. Projected or Actual Date of Commencement of Construction : 01-Jan-2001

3. Projected Date of Completion of Construction : 01-Jan-2003

Professional Engineer Certification

1. Professional Engineer Name : Stephanie S. Brooks
   Registration Number : 042489

2. Professional Engineer Mailing Address :

   Organization/Firm : Brooks & Associates, Inc.
   Street Address : 5068 N.W. 85th Road
   City : Coral Springs State : FL Zip Code : 33067

3. Professional Engineer Telephone Numbers :
   Telephone : (954)796-1987 Fax : (954)996-1984

4. 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 pollutant 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.

If the purpose of this application is to obtain a Title V source 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 schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] 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.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision 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 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.

Stephanie S. Brooks — Signature (seal)

11-10-00 — Date

* Attach any exception to certification statement.

Application Contact

1. Name and Title of Application Contact : Name : Scott Quaas Title : Environmental Manager
2. Application Contact Mailing Address : Organization/Firm : Tarmac America, Inc. Street Address : 455 Fairway Drive City : Deerfield Beach State : FL Zip Code : 33441
3. Application Contact Telephone Numbers : Telephone : (954)425-4165 Fax : (954)480-9352

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility, Location, and Type

1. Facility UTM Coordinates : Zone : 17 East (km) : 562.80 North (km) : 2861.70			
2. Facility Latitude/Longitude : Latitude (DD/MM/SS) : 25 52 30 Longitude (DD/MM/SS) : 80 22 30			
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 :			

Facility Contact

1. Name and Title of Facility Contact : Scott Quaas Environmental Manager
2. Facility Contact Mailing Address : Organization/Firm : Tarmac America, Inc. Street Address : 455 Fairway Drive City : Deerfield Beach State : FL Zip Code : 33441
3. Facility Contact Telephone Numbers : Telephone : (954)425-4165 Fax : (954)480-9352

Facility Regulatory Classifications

1. Small Business Stationary Source?	N
2. Title V Source?	Y
3. Synthetic Non-Title V Source?	N
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	Y
5. Synthetic Minor Source of Pollutants Other than HAPs?	N
6. Major Source of Hazardous Air Pollutants (HAPs)?	Y
7. Synthetic Minor Source of HAPs?	N
8. One or More Emissions Units Subject to NSPS?	Y
9. One or More Emission Units Subject to NESHAP?	Y
10. Title V Source by EPA Designation?	N
11. Facility Regulatory Classifications Comment :	

B. FACILITY REGULATIONS

Rule Applicability Analysis

B. FACILITY REGULATIONS

List of Applicable Regulations

62-296.320(4)(c) - Unconfined Emissions

Dade County - See 24-17

62-210.700(1) Excess Emissions

62-210.700(4) Excess Emissions

62-210.700(5) Excess Emissions

62-210.700(6) Excess Emissions

62-296.320(4) General Visible Emissions Std.

C. FACILITY POLLUTANTS

Facility Pollutant Information

1. Pollutant Emitted	2. Pollutant Classification
PM10	A
VOC	A
SAM	B
SO2	A
NOX	A
PM	A
CO	A
H106	A
DIOX	B

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 1

1. Pollutant Emitted :	PM10
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 2

1. Pollutant Emitted :	VOC
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 3

1. Pollutant Emitted :	SAM
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 4

1. Pollutant Emitted :	SO2
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 5

1. Pollutant Emitted :	NOX
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 6

1. Pollutant Emitted :	PM	
2. Requested Emissions Cap :	0.0000 (lbs/hour)	0.0000 (tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment :		

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 7

1. Pollutant Emitted :	CO
2. Requested Emissions Cap :	0.0000 (lbs/hour) 0.0000 (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 8

1. Pollutant Emitted :	H106
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY POLLUTANT DETAIL INFORMATION

Facility Pollutant Information Pollutant 9

1. Pollutant Emitted :	DIOX
2. Requested Emissions Cap :	(lbs/hour) (tons/year)
3. Basis for Emissions Cap Code :	
4. Facility Pollutant Comment :	

D. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications

1. Area Map Showing Facility Location :	Attachment A
2. Facility Plot Plan :	Attachment A
3. Process Flow Diagram(s) :	Attachment A
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	NA
5. Fugitive Emissions Identification :	NA
6. Supplemental Information for Construction Permit Applic	Attachment B

Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt
8. List of Equipment/Activities Regulated under
9. Alternative Methods of Operation :
10. Alternative Modes of Operation (Emissions
11. Identification of Additional Applicable
12. Compliance Assurance Monitoring
13. Risk Management Plan Verification :
14. Compliance Report and Plan :
15. Compliance Certification (Hard-copy Requir

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 1

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : COAL HANDLING SYSTEM		
2. Emissions Unit Identification Number : 003 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment :		

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Emissions Unit Control Equipment 1

1. Description : Baghouses (5)
2. Control Device or Method Code : 18

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Emissions Unit Control Equipment 2

1. Description : Process Enclosure
2. Control Device or Method Code : 54

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Emissions Unit Details

1. Initial Startup Date :				
2. Long-term Reserve Shutdown Date :				
3. Package Unit : Manufacturer :			Model Number :	
4. Generator Nameplate Rating :	MW			
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 0 0.00 0		 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr		
2. Maximum Incinerator Rate :	0.00	lb/hr	0.00	tons/day
3. Maximum Process or Throughput Rate :	30	tons/h		
4. Maximum Production Rate :	0			
5. Operating Capacity Comment : Max process rate reflects the rated coal mill capacity				

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	hours/day		days/week
	weeks/year	7,884	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Rule Applicability Analysis

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

List of Applicable Regulations

40 CFR 60.11(b) General NSPS Requirements

40 CFR 60.11(c) General NSPS Requirements

40 CFR 60.11(d) General NSPS Requirements

40 CFR 60.12 General NSPS Requirements

40 CFR 60.19 General NSPS Requirements

40 CFR 60.252(c) Subpart Y

40 CFR 60.254(a)

40 CFR 60.254(b)(2)

40 CFR 60.7 General NSPS Requirements

40 CFR 60.8 General NSPS Requirements

62-296.320(4)(a) Process Weight Table

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code :	3	
3. Descriptions of Emission Points Comprising this Emissions Unit : See Attachment B - Unit 1R		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	V	
6. Stack Height :	370	feet
7. Exit Diameter :	18.00	feet
8. Exit Temperature :	200	°F
9. Actual Volumetric Flow Rate :	54,500	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates : Zone : 17 East (km) : 562.900 North (km) : 2,861.700		
14. Emission Point Comment : Refer to Attachment B for point specific data. Data above reflect coal mill exit gas emitted through common stack.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Bulk Material Stockpiles: Coal	
2. Source Classification Code (SCC) : 30510303	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 30.00	5. Maximum Annual Rate : 190,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 0.00	8. Maximum Percent Ash : 0.00
9. Million Btu per SCC Unit : 0	
10. Segment Comment : Average hourly rate is 22.32 TPH and relates to coal/petcoke consumption by plant.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Bulk Material Conveyors; Coal	
2. Source Classification Code (SCC) : 30510103	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 30.00	5. Maximum Annual Rate : 190,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Average hourly rate is 22.32 TPH and relates to coal/petcoke consumption by plant.	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		NS

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 4.6300000 lb/hour 16.7000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: 1 1.00 to 5.00 tons/year
6. Emissions Factor 0 Units gr/dscf Reference Manufacturer Info.
7. Emissions Method Code : 2
8. Calculations of Emissions : Item 6: 0.01 gr/dscf See Attachment B for further details.
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 3.8900000 lb/hour 14.1000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: 1 1.00 to 5.00 tons/year
6. Emissions Factor Units Reference Engineering judgment
7. Emissions Method Code : 2
8. Calculations of Emissions : PM10 = 84% of PM See Attachment B
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	dscf		
4. Equivalent Allowable Emissions :	4.63	lb/hour	16.70	tons/year
5. Method of Compliance : EPA Method 9 Test				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	20 %
Exceptional Conditions :	0 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Initial EPA Method 9	
5. Visible Emissions Comment :	
Coal dryer and coal handling baghouses subject to 40 CFR 60, Subpart Y	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 1
COAL HANDLING SYSTEM

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
Initial Method 9	
5. Visible Emissions Comment :	
Current permit limit	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :				
PM : C		SO2 :		NO2 :
4. Baseline Emissions :				
PM :	0.0000	lb/hour	0.0000	tons/year
SO2 :	0.0000	lb/hour	0.0000	tons/year
NO2 :			0.0000	tons/year
5. PSD Comment :				
Emission unit does not emit SO2 or NOx.				

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 1

COAL HANDLING SYSTEM

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 2

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : CLINKER HANDLING &STORAGE SYSTEM		
2. Emissions Unit Identification Number : 002 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment : Original ARMS Nos. are 008 and 009		

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Emissions Unit Control Equipment 1

1. Description : Baghouses (4)
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Emissions Unit Details

1. Initial Startup Date :			
2. Long-term Reserve Shutdown Date :			
3. Package Unit : Manufacturer :		Model Number :	
4. Generator Nameplate Rating :	0	MW	
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 0 0.00 0	 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr		
2. Maximum Incinerator Rate :	0.00	lb/hr	0.00	tons/day
3. Maximum Process or Throughput Rate :	320	TPH		
4. Maximum Production Rate :	1,942,500	TPY		
5. Operating Capacity Comment :				

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	hours/day		days/week
	weeks/year	8,760	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Rule Applicability Analysis

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

List of Applicable Regulations

62-296.320(4)(b) Visible Emissions

40 CFR 63, Subpart A and LLL

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code :	3	
3. Descriptions of Emission Points Comprising this Emissions Unit : Refer to Attachment B		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	H	
6. Stack Height :	160	feet
7. Exit Diameter :	0.00	feet
8. Exit Temperature :	175	°F
9. Actual Volumetric Flow Rate :	5,000	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Data presented above reflects 481.BF03 baghouse. Refer to Attachment B for additional data.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement Manufacturing: Dry Process; Clinker Transfer	
2. Source Classification Code (SCC) : 30500616	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate : 320.00	5. Maximum Annual Rate : 1,942,500.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement Manufacturing: Dry Process; Clinker Storage Silos	
2. Source Classification Code (SCC) :	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 320.00	5. Maximum Annual Rate : 1,942,500.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.5000000 lb/hour 6.1500000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: 1 1.00 to 5.00 tons/year
6. Emissions Factor 0.01 Units gr/dscf Reference Manufacturer Design
7. Emissions Method Code : 0
8. Calculations of Emissions : See Attachment B
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.2600000 lb/hour 5.1700000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: 1 1.00 to 5.00 tons/year
6. Emissions Factor Units Reference AP-42
7. Emissions Method Code : 0
8. Calculations of Emissions : PM10 = 84% of PM
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dscf		
4. Equivalent Allowable Emissions :	1.50	lb/hour	6.15	tons/year
5. Method of Compliance : Per 63.1350(a)				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	10 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
Per 63.1350(a)	
5. Visible Emissions Comment :	
Per 63.1348	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 2
CLINKER HANDLING &STORAGE SYSTEM

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	%
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
EPA Method 9	
5. Visible Emissions Comment :	
Current permit limit	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM :	SO2 :	NO2 :
C	U	

4. Baseline Emissions :

PM :	0.0000	lb/hour	0.0000 tons/year
SO2 :	0.0000	lb/hour	0.0000 tons/year
NO2 :			0.0000 tons/year

5. PSD Comment :

Emissions unit does not emit SO2 or NOx.

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 2

CLINKER HANDLING &STORAGE SYSTEM

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 3

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : FINISH MILLS #3, 4, & 6		
2. Emissions Unit Identification Number : 003 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment : Original ARMS Nos. 012 and 013 for FM 3 and 4 FM 6 will be new		

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

Emissions Unit Control Equipment 1

1. Description : Baghouses (10)
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Emissions Unit Details

1. Initial Startup Date :			
2. Long-term Reserve Shutdown Date :			
3. Package Unit : Manufacturer :		Model Number :	
4. Generator Nameplate Rating :	MW		
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 0 0.00 0	 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr		
2. Maximum Incinerator Rate :	0.00	lb/hr	0.00	tons/day
3. Maximum Process or Throughput Rate :	334	TPH		
4. Maximum Production Rate :	2109000	TPY		
5. Operating Capacity Comment :				

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	hours/day		days/week
	weeks/year	8,760	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Rule Applicability Analysis

List of Applicable Regulations

Finish Mill #4 Only (before 6/10/02)

40 CFR 60.11(b) General NSPS Requirements

40 CFR 60.11(c) General NSPS Requirements

40 CFR 60.11(d) General NSPS Requirements

40 CFR 60.12 General NSPS Requirements

40 CFR 60.19 General NSPS Requirements

40 CFR 60.62(c) NSPS Subpart F

40 CFR 60.7 General NSPS Requirements

40 CFR 60.8 General NSPS Requirements

Finish Mills #3 & 4: 62-296.320(4)(a) Process Weight Standard

40 CFR 63, Subparts A and LLL (after 6/10/02)

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code :	3	
3. Descriptions of Emission Points Comprising this Emissions Unit : 10 baghouses. Refer to Attachment B		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	H	
6. Stack Height :	110	feet
7. Exit Diameter :	2.00	feet
8. Exit Temperature :	110	°F
9. Actual Volumetric Flow Rate :	30,000	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Stack data representative of baghouse F-430. Refer to Attachment B for point specific data. Exit temperature may range from 100-200 deg. F.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement Manufacturing; Dry Process; Clinker Grinding	
2. Source Classification Code (SCC) : 30500617	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 334.00	5. Maximum Annual Rate : 2,109,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 0.00	8. Maximum Percent Ash : 0.00
9. Million Btu per SCC Unit : 0	
10. Segment Comment : FM3 - 84 t/hr FM4 - 140 t/hr FM6 - 110	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 18.1000000 lb/hour 79.2000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0 Units gr/acf Reference vendor information
7. Emissions Method Code : 0
8. Calculations of Emissions : Item 6: 0.01 gr/acf (FM 3 & 4); 0.01 gr/dscf (FM 6) Refer to Attachment B for details
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 15.2000000 lb/hour 66.5000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor Units Reference AP-42
7. Emissions Method Code : 2
8. Calculations of Emissions : Item 6: PM10 = 84% of PM Refer to Attachment B
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/acf		
4. Equivalent Allowable Emissions :	18.10	lb/hour	79.20	tons/year
5. Method of Compliance : Per 40 CFR 63.1350				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Requested permit limits				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Visible Emissions Limitation : *Visible Emissions Limitation* 1

1. Visible Emissions Subtype :	10		
2. Basis for Allowable Opacity :	RULE		
3. Requested Allowable Opacity :			
Normal Conditions :	10	%	
Exceptional Conditions :	0	%	
Maximum Period of Excess Opacity Allowed :	0	min/hour	
4. Method of Compliance : Per 40 CFR 63.1350			
5. Visible Emissions Comment : VE limit per 40 CFR 63.1347 and 1348			

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype : 10
2. Basis for Allowable Opacity :
3. Requested Allowable Opacity : Normal Conditions : 10 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : EPA Method 9
5. Visible Emissions Comment : Current permit limit for FM 3

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 3
FINISH MILLS #3, 4, & 6

Visible Emissions Limitation : Visible Emissions Limitation 3

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
EPA Method 9	
5. Visible Emissions Comment :	
BACT determination for FM 4 in PSD-FL-236	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	0.0000 lb/hour	0.0000 tons/year
SO2 :	0.0000 lb/hour	0.0000 tons/year
NO2 :		0.0000 tons/year
5. PSD Comment :		
Emission unit does not emit NOx or SO2.		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 3

FINISH MILLS #3, 4, & 6

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 4

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : CEMENT STORAGE, PACKHOUSE AND LOADOUT		
2. Emissions Unit Identification Number : 004 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : A	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment : Original ARMS ID Nos. are 014, 016, and 015, for the Cement Silos, Packhouse and bulk Loadout units Nos. 1, 2, 3, respectively.		

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Emissions Unit Control Equipment 1

1. Description : Baghouses (11)
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Emissions Unit Details

1. Initial Startup Date :			
2. Long-term Reserve Shutdown Date :			
3. Package Unit : Manufacturer :		Model Number :	
4. Generator Nameplate Rating :	MW		
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 0 0.00 0	 Degrees Fahrenheit Seconds Degrees Fahrenheit	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	0	mmBtu/hr		
2. Maximum Incinerator Rate :	0.00	lb/hr	0.00	tons/day
3. Maximum Process or Throughput Rate :	0			
4. Maximum Production Rate :	2109000	TPY		
5. Operating Capacity Comment :				

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	24 hours/day		days/week
	52 weeks/year	8,760	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Rule Applicability Analysis

List of Applicable Regulations

For affected facilities constructed after 1971 - NSPS applies until 6/10/02

40 CFR 60.11(b) General NSPS Requirements

40 CFR 60.11(c) General NSPS Requirements

40 CFR 60.11(d) General NSPS Requirements

40 CFR 60.12 General NSPS Requirements

40 CFR 60.19 General NSPS Requirements

40 CFR 60.62(c) Portland Cement Plant NSPS Requirement for non-kiln, non-cooler sources

40 CFR 60.7 General NSPS Requirements

40 CFR 60.8 General NSPS Requirements

40 CFR 63, Subparts A and LLL (After 6/10/02)

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code : 3		
3. Descriptions of Emission Points Comprising this Emissions Unit : Refer to Attachment B		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	H	
6. Stack Height :	200	feet
7. Exit Diameter :	1.10	feet
8. Exit Temperature :	90	°F
9. Actual Volumetric Flow Rate :	18,000	acfm
10. Percent Water Vapor :	0.00	%
11. Maximum Dry Standard Flow Rate :	0	dscfm
12. Nonstack Emission Point Height :	0	feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : Stack data for baghouse F511. Refer to Attachment B for point-specific data.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) :	
2. Source Classification Code (SCC) : 3-05-007-19	
3. SCC Units : Tons Cement Produced	
4. Maximum Hourly Rate : 38.19	5. Maximum Annual Rate :
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur : 0.00	8. Maximum Percent Ash : 0.00
9. Million Btu per SCC Unit : 0	
10. Segment Comment : CEMENT MFG-WET PROCESS-LOADOUT	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement Manufacturing Dry Process; Cement storage silos	
2. Source Classification Code (SCC) : 30500618	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 500.00	5. Maximum Annual Rate : 2,109,000.00
6. Estimated Annual Activity Factor : 0.00	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement Manufacturing Dry Process; Cement Loadout	
2. Source Classification Code (SCC) :	
3. SCC Units : Gallons Produced Or Manufactured	
4. Maximum Hourly Rate : 500.00	5. Maximum Annual Rate : 2,109,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	18		EL
2 - PM10	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : 0.00 %
3. Potential Emissions : 6.9800000 lb/hour 25.8000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: 1 1.00 to 5.00 tons/year
6. Emissions Factor 0 Units gr/acf Reference Permit Limit
7. Emissions Method Code : 2
8. Calculations of Emissions : Item 6: 0.01 gr/acf. See Attachment B for further details.
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : 0.00 %
3. Potential Emissions : 5.8600000 lb/hour 21.7000000 tons/year
4. Synthetically Limited? [ ] Yes [X] No
5. Range of Estimated Fugitive/Other Emissions: 0.00 to 0.00 tons/year
6. Emissions Factor Units Reference Reference AP-42
7. Emissions Method Code : 2
8. Calculations of Emissions : Item 6: PM10 = 84% of PM
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/acf		
4. Equivalent Allowable Emissions :	6.98	lb/hour	25.80	tons/year
5. Method of Compliance : Per 63.1350				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	05
2. Basis for Allowable Opacity :	OTHER
3. Requested Allowable Opacity :	
Normal Conditions :	5 %
Exceptional Conditions :	0 %
Maximum Period of Excess Opacity Allowed :	0 min/hour
4. Method of Compliance :	
Per 63.1350	
5. Visible Emissions Comment :	
5% opacity only for Bulk Cement Loadout Unit 3 Packhouse and Cement Silos 10, 11 and 12 pursuant to BACT determination (10/15/79). Cement Silos 7-9 limited to 5% opacity per PSD-FL-236.	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype : 10
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 10 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Per 63.1350
5. Visible Emissions Comment : 40 CFR 63.1348 for baghouses other than those noted in other V.E. pages.

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 4
CEMENT STORAGE, PACKHOUSE AND LOADOUT

Visible Emissions Limitation : Visible Emissions Limitation 3

1. Visible Emissions Subtype : 20
2. Basis for Allowable Opacity : OTHER
3. Requested Allowable Opacity : Normal Conditions : 20 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Per 63.1350
5. Visible Emissions Comment : Per current permit, cement silo 1-6 have V.E. limit of 20%.

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[X] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :

PM : C	SO2 :	NO2 :

4. Baseline Emissions :

PM :	0.0000 lb/hour	0.0000 tons/year
SO2 :	0.0000 lb/hour	0.0000 tons/year
NO2 :		0.0000 tons/year

5. PSD Comment :

Emission unit does not emit SO2 or NOx. Baseline emissions are unknown

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 4

CEMENT STORAGE, PACKHOUSE AND LOADOUT

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 5

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Raw Mill and Pyroprocessing Unit		
2. Emissions Unit Identification Number : 005 [ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment : Pyroprocessing consists of the Preheater/Calciner, Kiln, and Cooler		

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Emissions Unit Control Equipment 1

1. Description : 2 Baghouses (main stack and bin)
2. Control Device or Method Code : 16

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Emissions Unit Control Equipment 2

1. Description : 4 baghouses for blend silo and preheat tower
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Emissions Unit Details

1. Initial Startup Date :	
2. Long-term Reserve Shutdown Date :	
3. Package Unit : Manufacturer :	Model Number :
4. Generator Nameplate Rating :	MW
5. Incinerator Information : Dwell Temperature : Dwell Time : Incinerator Afterburner Temperature :	 Degrees Fahrenheit Seconds Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :	675	mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :			
4. Maximum Production Rate :	250	TPH	
5. Operating Capacity Comment :			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :	
hours/day	days/week
weeks/year	7,884 hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Rule Applicability Analysis

List of Applicable Regulations

40 CFR Part 63, Suparts A and LLL

62-296.320(4)(a) Process Weight Table

62-296.407 Portland Cement Plants

62-296.507(4)(b)8 RACT Requirements for Major VOC and NOx Emitting Facilities

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :	
2. Emission Point Type Code :	3
3. Descriptions of Emission Points Comprising this Emissions Unit : See Attachment B - Unit 1R	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :	
5. Discharge Type Code :	V
6. Stack Height :	370 feet
7. Exit Diameter :	18.00 feet
8. Exit Temperature :	194 °F
9. Actual Volumetric Flow Rate :	486,000 acfm
10. Percent Water Vapor :	0.00 %
11. Maximum Dry Standard Flow Rate :	0 dscfm
12. Nonstack Emission Point Height :	0 feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :	
14. Emission Point Comment : Stack data representative of clinker production operation with raw mill operating. See Attachment B - Unit 2R for other emission points.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : In-process fuel use; Industrial processes; Cement Kiln/Dryer; natural gas	
2. Source Classification Code (SCC) : 39000602	
3. SCC Units : Million Cubic Feet Burned (all gaseous fuels)	
4. Maximum Hourly Rate : 0.68	5. Maximum Annual Rate : 4,436.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 1,000	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Segment Description and Rate : Segment 2

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products: Cement Manufacturing: Dry Process: Raw Material Grinding and Drying	
2. Source Classification Code (SCC) : 30500613	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 400.00	5. Maximum Annual Rate : 2,792,250.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Segment refers to raw feed produced from raw mill.	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Segment Description and Rate : Segment 3

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products: Cement manufacturing: Dry process: Kilns	
2. Source Classification Code (SCC) : 30500606	
3. SCC Units : Tons Processed	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 1,642,500.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Segment refers to clinker production	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Segment Description and Rate : Segment 4

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Mineral Products; Cement manufacturing: dry Process: Clinker Cooler	
2. Source Classification Code (SCC) : 30500614	
3. SCC Units : Tons Produced Or Manufactured	
4. Maximum Hourly Rate : 250.00	5. Maximum Annual Rate : 1,642,500.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment : Segment refers to clinker through clinker cooler	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Segment Description and Rate : Segment 5

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : In-process fuel use; Industrial Processes; Cement Kiln/Dryer (Bituminous Coal)	
2. Source Classification Code (SCC) : 30900201	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 30.00	5. Maximum Annual Rate : 190,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 3.50	8. Maximum Percent Ash : 20.00
9. Million Btu per SCC Unit : 25	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Segment Description and Rate : Segment 6

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : In-process Fuel use; Industrial processes; General coke	
2. Source Classification Code (SCC) : 39000899	
3. SCC Units : Tons Burned (all solid fuels)	
4. Maximum Hourly Rate : 30.00	5. Maximum Annual Rate : 158,432.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur : 5.50	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 28	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Segment Description and Rate : Segment 7

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : In-process fuel use; Industrial processes; Cement Kiln/Dryer No. 2 Fuel Oil with used oil blend	
2. Source Classification Code (SCC) : 39000502	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 4.86	5. Maximum Annual Rate : 31,914.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 139	
10. Segment Comment :	

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5

RAW MILL AND PYROPROCESSING UNIT

Segment Description and Rate : Segment 8

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : In-process fuel use; Industrial processes; Cement Kiln/Dryer NO. 6 Fuel Oil with used oil blend	
2. Source Classification Code (SCC) : 39000402	
3. SCC Units : Thousand Gallons Burned (all liquid fuels)	
4. Maximum Hourly Rate : 4.44	5. Maximum Annual Rate : 29,185.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit : 152	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - SO2			EL
2 - PM	016		EL
3 - PM10	016		EL
4 - H106			NS
5 - NOX			EL
6 - CO			EL
7 - VOC			EL
8 - SAM			EL
9 - DIOX			WP

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **SO2**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 320.0000000 lb/hour 806.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0.98 Units lb/ton clinker Reference Vendor information
7. Emissions Method Code : 2
8. Calculations of Emissions : 1,642,500 tons clinker/yr x 0.98 lb/ton clinker x 1 tons/2000 lb = 806 TPY 320 lb/hr = permit limit
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
RAW MILL AND PYROPROCESSING UNIT

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 53.1000000 lb/hour 175.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0.125 Units lb/ton KF Reference Vendor information
7. Emissions Method Code : 0
8. Calculations of Emissions : 0.125 lb/PM/ton KF 2,792,250 tons KF/year x 1 ton/2000 lb = 175 TPY 53.1 lb/hr = permit limit
9. Pollutant Potential/Estimated Emissions Comment :

Suwannee 0.13 lb/ton of KF.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 3

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 44.4000000 lb/hour 147.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor Units Reference AP-42
7. Emissions Method Code : 2
8. Calculations of Emissions : Item 6: PM10 = 84% of PM
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 4

1. Pollutant Emitted : **H106**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor Units Reference
7. Emissions Method Code :
8. Calculations of Emissions :
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 5

1. Pollutant Emitted : **NOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 720.0000000 lb/hour 1,953.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 2.38/2.80 . Units lb/ton clinker Reference Vendor information State of the art Suwannee.
7. Emissions Method Code : 0
8. Calculations of Emissions : 2.38 lb/ton clinker x 1,642,500 tons clinker/yr x 1 ton/2000 lb = 1,953 TPY
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 6

1. Pollutant Emitted : **CO**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 576.0000000 lb/hour 1,457.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 1.77 (good number) Units lb/ton clinker Reference Vendor information
7. Emissions Method Code : 0
8. Calculations of Emissions : 1.77 lb/ton clinker x 1,642,500 TPY/2000 lb/ton = 1,457.0 TPY
9. Pollutant Potential/Estimated Emissions Comment :

Florida Rock - 3.60 lb/ton of clinker.

3.60 lb/ton.

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 7

1. Pollutant Emitted : **VOC**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 40.0000000 lb/hour 155.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0.19 / 0.12 Suwannee Units lb/ton clinker Reference Vendor information Make it
7. Emissions Method Code : 2
8. Calculations of Emissions : 0.19 lb/ton clinker x 1,642,500 TPY/2000 lb/ton = 155 TPY
9. Pollutant Potential/Estimated Emissions Comment : (Fuller) In dt. Nov 2, Nov 9. 2000 (Polysius. VOC primarily from materials. Oil free mill scale. Type 2 cement (Dept. of Transparent hughes. iron content) Type 1 cement (do not need don)

Paper written Polysius Corp Manufacture the equipment for cement plants.
Ref. - Site the Paper. Employee of Polysius. - Mark Terry
Presented at the Assoc Conference Dec 2000 South Carolina

Fuller:
Polysius

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 8

1. Pollutant Emitted : **SAM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 2.2400000 lb/hour 8.6800000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0.011 Units lb/ton clinker Reference Vendor information
7. Emissions Method Code : 2
8. Calculations of Emissions : (0.011 lb/ton clinker x 1,642,500 TPY)/2000 lb/ton = 8.68 TPY
9. Pollutant Potential/Estimated Emissions Comment :

F.R. -
Saw -

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Potential/Estimated Emissions : Pollutant 9

1. Pollutant Emitted : **DIOX**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited? [ ] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor Units Reference
7. Emissions Method Code :
8. Calculations of Emissions :
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.98	lb/ton		
4. Equivalent Allowable Emissions :	320.00	lb/hour	806.00	tons/year
5. Method of Compliance : CEMS				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Field 3: 1.54 lb/ton clinker (max 24 hr avg; 0.98 lb/t clinker annual avg. Based on current hourly permit limit and equivalent annual emissions				

Emissions Unit Information Section 5
RAW MILL AND PYROPROCESSING UNIT

Pollutant Information Section 2

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.13	lb/ton KF		
4. Equivalent Allowable Emissions :	53.10	lb/hour	175.00	tons/year
5. Method of Compliance : Annual Method 5				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Emission limit based on vendor design information. Represents emissions from common stack. Equivalent to 0.213 lb/t clinker.				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 2

Allowable Emissions 2

1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	0.30	lb/ton feed-dry
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Annual EPA Method 5		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : 40 CFR 60.1343(b)(1)		

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 3

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	44.40	lb/h		
4. Equivalent Allowable Emissions :	44.40	lb/hour	147.00	tons/year
5. Method of Compliance : PM10 = 84% of PM				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 5

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	2.38	lb/t clinker		
4. Equivalent Allowable Emissions :	720.00	lb/hour	1,953.00	tons/year
5. Method of Compliance : CEMS				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Field 3: 3.46 lb/t clinker (max 24 hr avg); 2.38 lb/t clinker (ann. avg.). Based on current hourly permit limit and equivalent annual emissions				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 6

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	1.77	lb/t clinker		
4. Equivalent Allowable Emissions :	576.00	lb/hour	1,457.00	tons/year
5. Method of Compliance : Annual Method 10				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Field 3: 2.76 lb/t clinker (max 24 hr avg); 1.77 lb/t clinker (ann avg) Based on current hourly permit limit and equivalent annual emissions				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 7

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.19	lb/t clinker		
4. Equivalent Allowable Emissions :	40.00	lb/hour	155.00	tons/year
5. Method of Compliance : Initial Method 25 or 25A				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Based on current hourly permit limit				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 8

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	2.24	lb/h		
4. Equivalent Allowable Emissions :	2.24	lb/hour	8.68	tons/year
5. Method of Compliance : Initial Method 8				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Based on current hourly permit limit and equivalent annual emissions				

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Pollutant Information Section 9

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	0.40	ng TEQ/dscm
4. Equivalent Allowable Emissions :	lb/hour	tons/year
5. Method of Compliance : Method 23 (initial and every 30 months)		
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) : Field 3: 0.4 ng/dscm at stack gas temperature < 400 degrees F per 40 CFR 63.1343(d)		

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	20
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	20 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
COMS	
5. Visible Emissions Comment :	
40 CFR 63.1343(b)(2) for main stack	

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Visible Emissions Limitation : Visible Emissions Limitation 2

1. Visible Emissions Subtype : 10
2. Basis for Allowable Opacity : RULE
3. Requested Allowable Opacity : Normal Conditions : 10 % Exceptional Conditions : % Maximum Period of Excess Opacity Allowed : min/hour
4. Method of Compliance : Per 40 CFR 60.1350(a)
5. Visible Emissions Comment : 40 CFR 63.1348 for sources other than main stack

J. CONTINUOUS MONITOR INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 5
Raw Mill and Pyroprocessing Unit

Continuous Monitoring System Continuous Monitor 1

1. Parameter Code : VE	2. Pollutant(s):
3. CMS Requirement RULE	
4. Monitor Information Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment : 40 CFR 63, Subpart LLL, Vendor not yet selected	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 : C	NO2 : C
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 5

Raw Mill and Pyroprocessing Unit

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	Attachment D
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

III. EMISSIONS UNIT INFORMATION

A. TYPE OF EMISSIONS UNIT
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6

Raw Material Handling

Type of Emissions Unit Addressed in This Section

1. Regulated or Unregulated Emissions Unit? Check one :

[X] 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.

2. Single Process, Group of Processes, or Fugitive Only? 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).

[X] 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.

Emissions Unit Information Section 6

B. GENERAL EMISSIONS UNIT INFORMATION
(Regulated and Unregulated Emissions Units)

Emissions Unit Description and Status

1. Description of Emissions Unit Addressed in This Section : Raw Material Handling		
2. Emissions Unit Identification Number : [X] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status Code : C	4. Acid Rain Unit? [ ] Yes [X] No	5. Emissions Unit Major Group SIC Code : 32
6. Emissions Unit Comment : Limestone/gypsum and additives storage silos and handling		

Emissions Unit Information Section 6

Raw Material Handling

Emissions Unit Control Equipment 1

1. Description : Baghouses (5)
2. Control Device or Method Code : 18

C. EMISSIONS UNIT DETAIL INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Raw Material Handling

Emissions Unit Details

1. Initial Startup Date :
2. Long-term Reserve Shutdown Date :
3. Package Unit : Manufacturer : Model Number :
4. Generator Nameplate Rating : MW
5. Incinerator Information : Dwell Temperature : Degrees Fahrenheit Dwell Time : Seconds Incinerator Afterburner Temperature : Degrees Fahrenheit

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate :		mmBtu/hr	
2. Maximum Incinerator Rate :		lb/hr	tons/day
3. Maximum Process or Throughput Rate :			
4. Maximum Production Rate :	3260000	TPY	
5. Operating Capacity Comment :			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule :			
	hours/day		days/week
	weeks/year	7,884	hours/year

D. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Raw Material Handling

Rule Applicability Analysis

List of Applicable Regulations

40 CFR 63, Subparts A and LLL

E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

RAW MATERIAL HANDLING

Emission Point Description and Type :

1. Identification of Point on Plot Plan or Flow Diagram :		
2. Emission Point Type Code : 3		
3. Descriptions of Emission Points Comprising this Emissions Unit : See Attachment B		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common :		
5. Discharge Type Code :	H	
6. Stack Height :		feet
7. Exit Diameter :		feet
8. Exit Temperature :	68	°F
9. Actual Volumetric Flow Rate :	11,000	acfm
10. Percent Water Vapor :		%
11. Maximum Dry Standard Flow Rate :		dscfm
12. Nonstack Emission Point Height :		feet
13. Emission Point UTM Coordinates : Zone : East (km) : North (km) :		
14. Emission Point Comment : For baghouse 311.BF01. See Attachment B for other emission points.		

F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 6

Raw Material Handling

Segment Description and Rate : Segment 1

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) : Raw material transfer	
2. Source Classification Code (SCC) : 30500612	
3. SCC Units : Tons Transferred Or Handled	
4. Maximum Hourly Rate :	5. Maximum Annual Rate : 3,260,000.00
6. Estimated Annual Activity Factor :	
7. Maximum Percent Sulfur :	8. Maximum Percent Ash :
9. Million Btu per SCC Unit :	
10. Segment Comment :	

G. EMISSIONS UNIT POLLUTANTS
(Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 6
Raw Material Handling

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL
2 - PM10	018		EL

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 6
Raw Material Handling

Pollutant Potential/Estimated Emissions : Pollutant 1

1. Pollutant Emitted : **PM**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 3.5200000 lb/hour 13.0000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor 0 Units gr/dscf Reference Manufacturers specif
7. Emissions Method Code : 0
8. Calculations of Emissions : Field 6: 0.01 gr/dscf See Attachment B for further detail
9. Pollutant Potential/Estimated Emissions Comment :

H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 6
Raw Material Handling

Pollutant Potential/Estimated Emissions : Pollutant 2

1. Pollutant Emitted : **PM10**
2. Total Percent Efficiency of Control : %
3. Potential Emissions : 1.9600000 lb/hour 10.9000000 tons/year
4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive/Other Emissions: to tons/year
6. Emissions Factor Units Reference Reference AP-42
7. Emissions Method Code : 2
8. Calculations of Emissions : Field 6: PM10 = 84% of PM
9. Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 6
Raw Material Handling

Pollutant Information Section 1

Allowable Emissions 1

1. Basis for Allowable Emissions Code :	OTHER			
2. Future Effective Date of Allowable Emissions :				
3. Requested Allowable Emissions and Units :	0.01	gr/dscf		
4. Equivalent Allowable Emissions :	3.52	lb/hour	13.00	tons/year
5. Method of Compliance : Per 63.1350				
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :				

I. VISIBLE EMISSIONS INFORMATION
(Regulated Emissions Units Only)

Emissions Unit Information Section 6
Raw Material Handling

Visible Emissions Limitation : Visible Emissions Limitation 1

1. Visible Emissions Subtype :	10
2. Basis for Allowable Opacity :	RULE
3. Requested Allowable Opacity :	
Normal Conditions :	10 %
Exceptional Conditions :	%
Maximum Period of Excess Opacity Allowed :	min/hour
4. Method of Compliance :	
Per 63.1350	
5. Visible Emissions Comment :	
40 CFR 63.1348	

K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 6

Raw Material Handling

PSD Increment Consumption Determination

1. Increment Consuming for Particulate Matter or Sulfur Dioxide?

[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.

[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

2. Increment Consuming for Nitrogen Dioxide?

[ ] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.

[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consuming/Expanding Code :		
PM : C	SO2 :	NO2 :
4. Baseline Emissions :		
PM :	lb/hour	tons/year
SO2 :	lb/hour	tons/year
NO2 :		tons/year
5. PSD Comment :		

L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

Raw Material Handling

Supplemental Requirements for All Applications

1. Process Flow Diagram :	Attachment A
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment :	Attachment B
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown :	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA

Additional Supplemental Requirements for Category I Applications Only

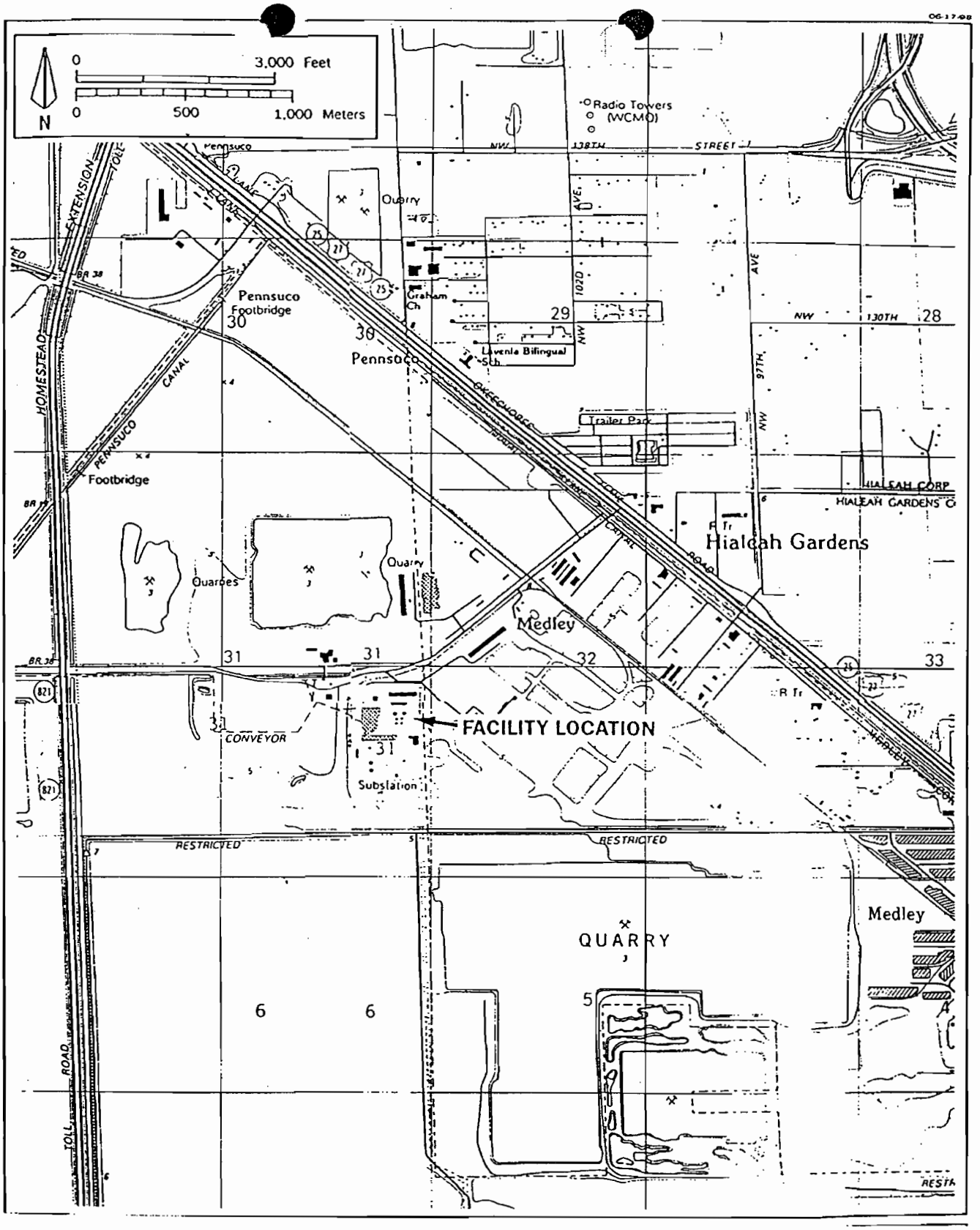
10. Alternative Methods of Operations :
11. Alterntive Modes of Operation (Emissions Trading) :

12. Identification of Additional Applicable Requirements :
13. Compliance Assurance Monitoring Plan :
14. Acid Rain Application (Hard-copy Required) : Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) New Unit Exemption (Form No. 62-210.900(1)(a)2.) Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)

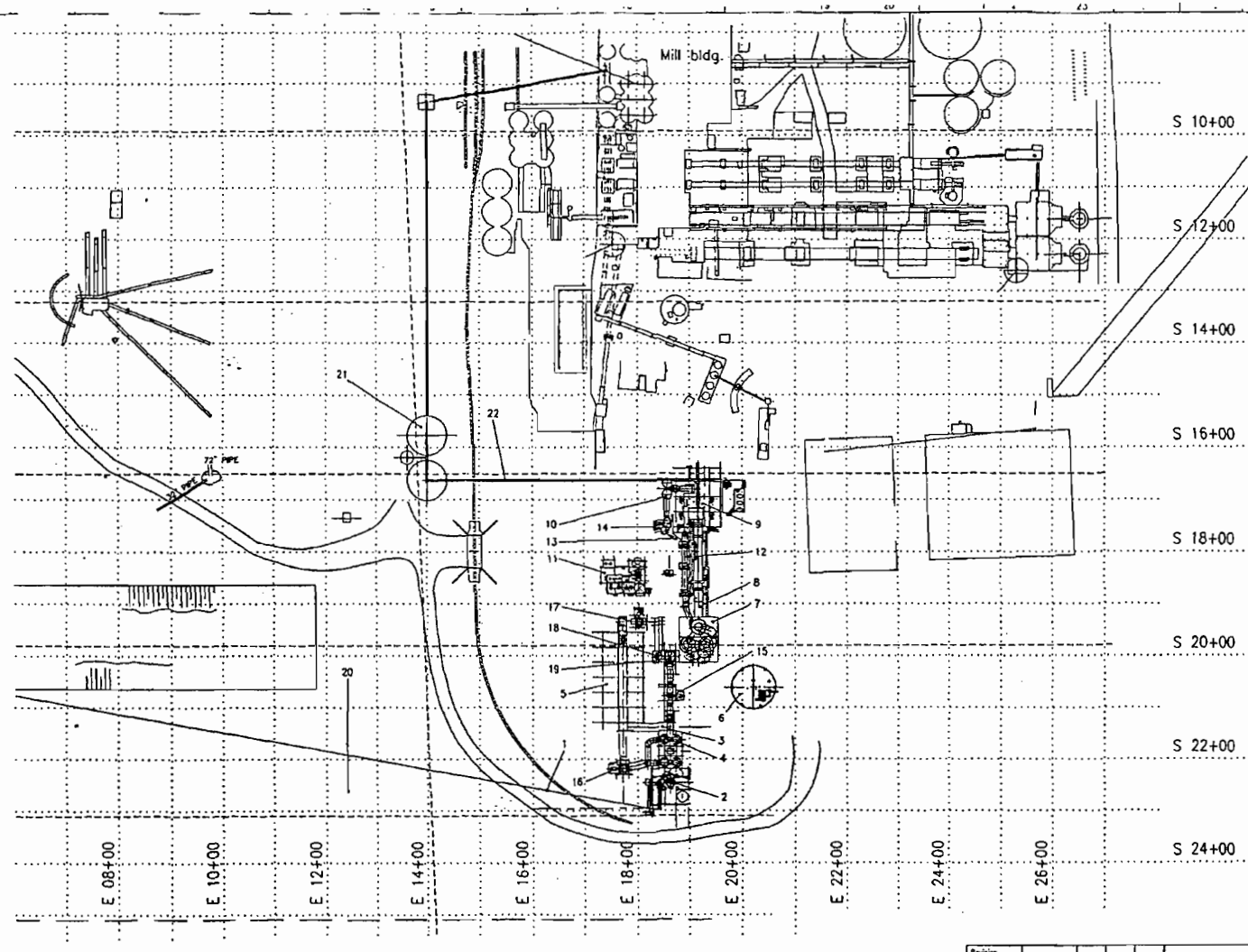
ATTACHMENT A

MAP, PLOT PLAN, AND PROCESS FLOW DIAGRAMS

BEST AVAILABLE COPY



1. Raw material feed belt
2. Raw mill grinding system
3. Raw mill by-pass duct
4. Raw mill cyclones
5. Raw mill dust collector
6. Kiln feed blending silo
7. Preheater
8. Kiln
9. Clinker cooler
10. Clinker cooler vent cyclones
11. Coal grinding system
12. Teritary oir duct
13. Cooler vent duct
14. Cooler vent fan
15. Preheater/kiln induced draft fan
16. Raw mill fan
17. Raw mill dust collector fon
18. Stack
19. Preheater gas conditioning sproy tower
20. Cool storoge pile
21. Clinker storoge silos
22. Clinker pan conveyor



A	03Nov00	Initial Issue
ISSUE	DATE	REMARKS

PRELIMINARY ISSUE

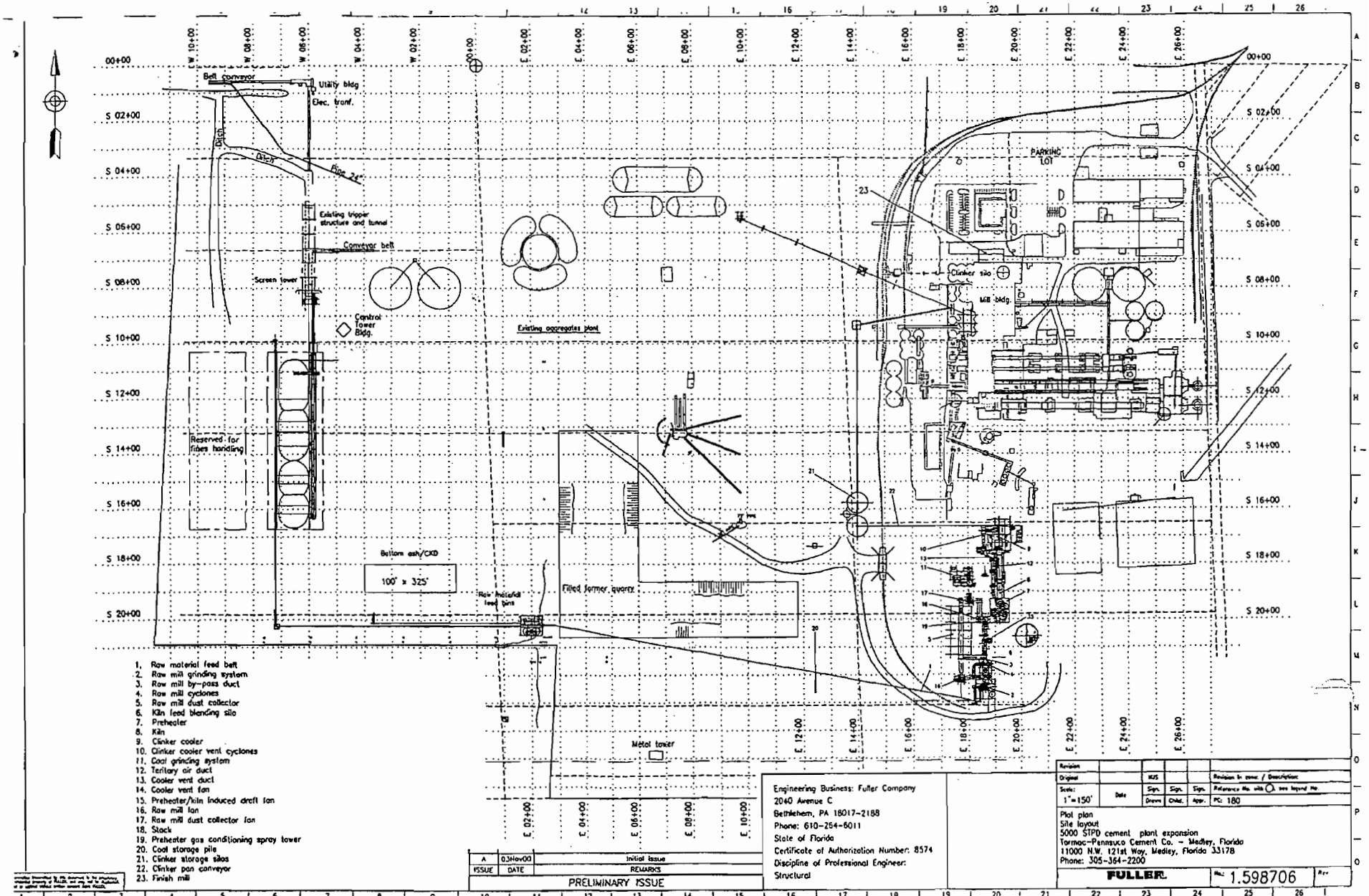
Engineering Business: Fuller Company
2040 Avenue C
Bethlehem, PA 18017-2188
Phone: 610-264-6011
State of Florida
Certificate of Authorization Number: 8574
Discipline of Professional Engineer:
Structural

Revision					
Original	03NOV00	RLS			Revision in items / Description
Scale: 1"=100'	Date	Sign. Drawn	Sign. Chkd.	Sign. Appr.	Reference No. with ○, see legend No. PC 180

Plot plan
Site layout
5000 STPD cement plant expansion
Tarmac-Pennsuco Cement Co. – Medley, Florida
11000 N.W. 121st Way, Medley, Florida 33178
Phone: 305-364-2200

FULLER

No: 1.598708 Rev.



1. Raw material feed belt
2. Raw mill grinding system
3. Raw mill by-pass duct
4. Raw mill cyclones
5. Raw mill dust collector
6. Kiln feed blending silo
7. Preheater
8. Kiln
9. Clinker cooler
10. Clinker cooler vent cyclones
11. Coal grinding system
12. Teritary air duct
13. Cooler vent duct
14. Cooler vent fan
15. Preheater/kiln induced draft fan
16. Raw mill fan
17. Raw mill dust collector fan
18. Stack
19. Preheater gas conditioning spray tower
20. Coal storage pile
21. Clinker storage silos
22. Clinker pan conveyor
23. Finish mill

ISSUE	DATE	REMARKS
A	03Nov00	Initial issue

PRELIMINARY ISSUE

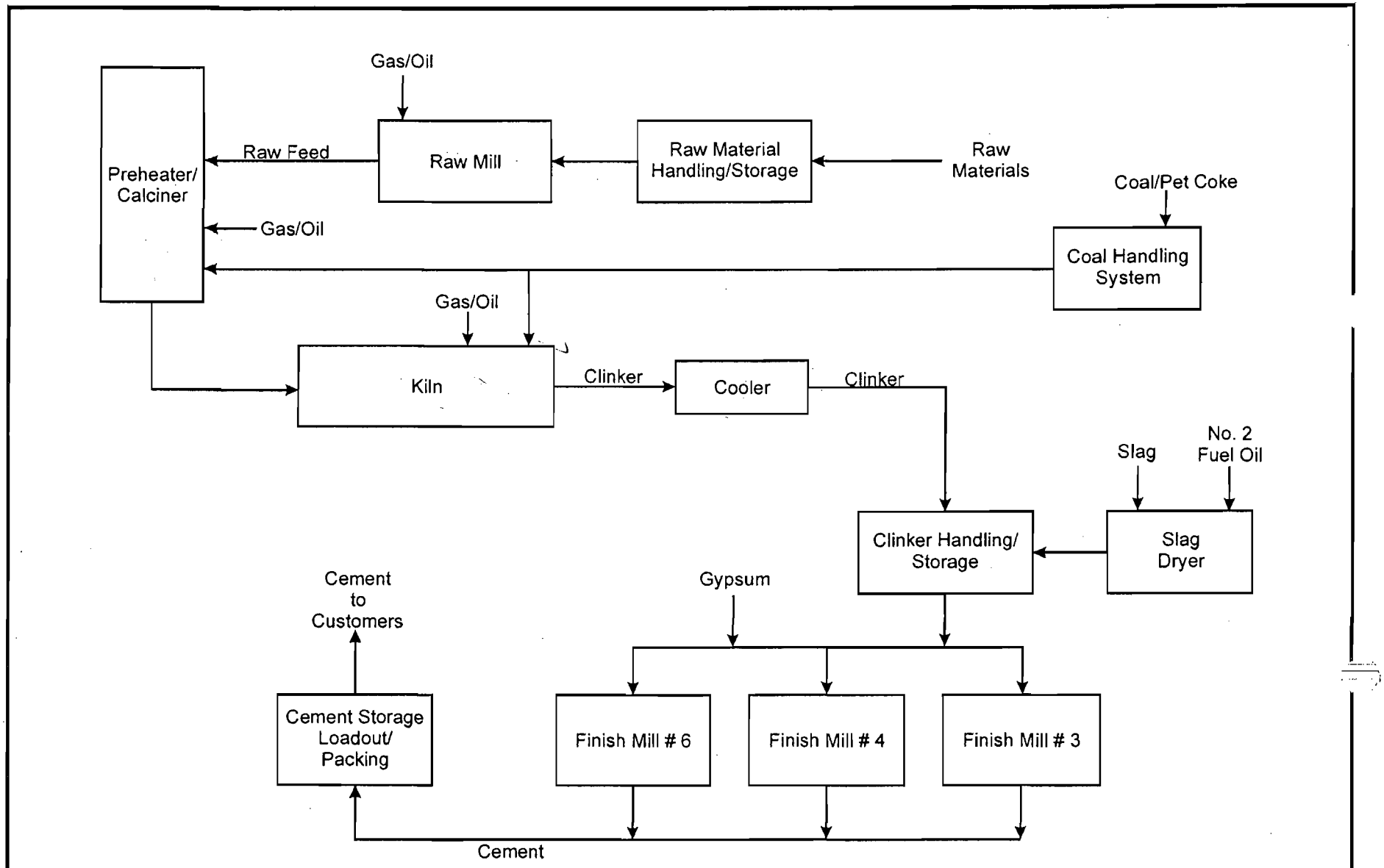
Engineering Business: Fuller Company
2040 Avenue C
Bethlehem, PA 18017-2188
Phone: 610-254-6011
State of Florida
Certificate of Authorization Number: 8574
Discipline of Professional Engineer:
Structural

Revision					
Original			KJS		Revision in zone / Description
Scale: 1"=150'	Date	Sign.	Sign.	Sign.	Reference No. with ○, see layout No.
		Drawn	Chkd.	Appr.	PC: 180

Plot plan
Site layout
5000 STPD cement plant expansion
Tarmac-Pennsuco Cement Co. - Medley, Florida
11000 N.W. 121st Way, Medley, Florida 33178
Phone: 305-364-2200

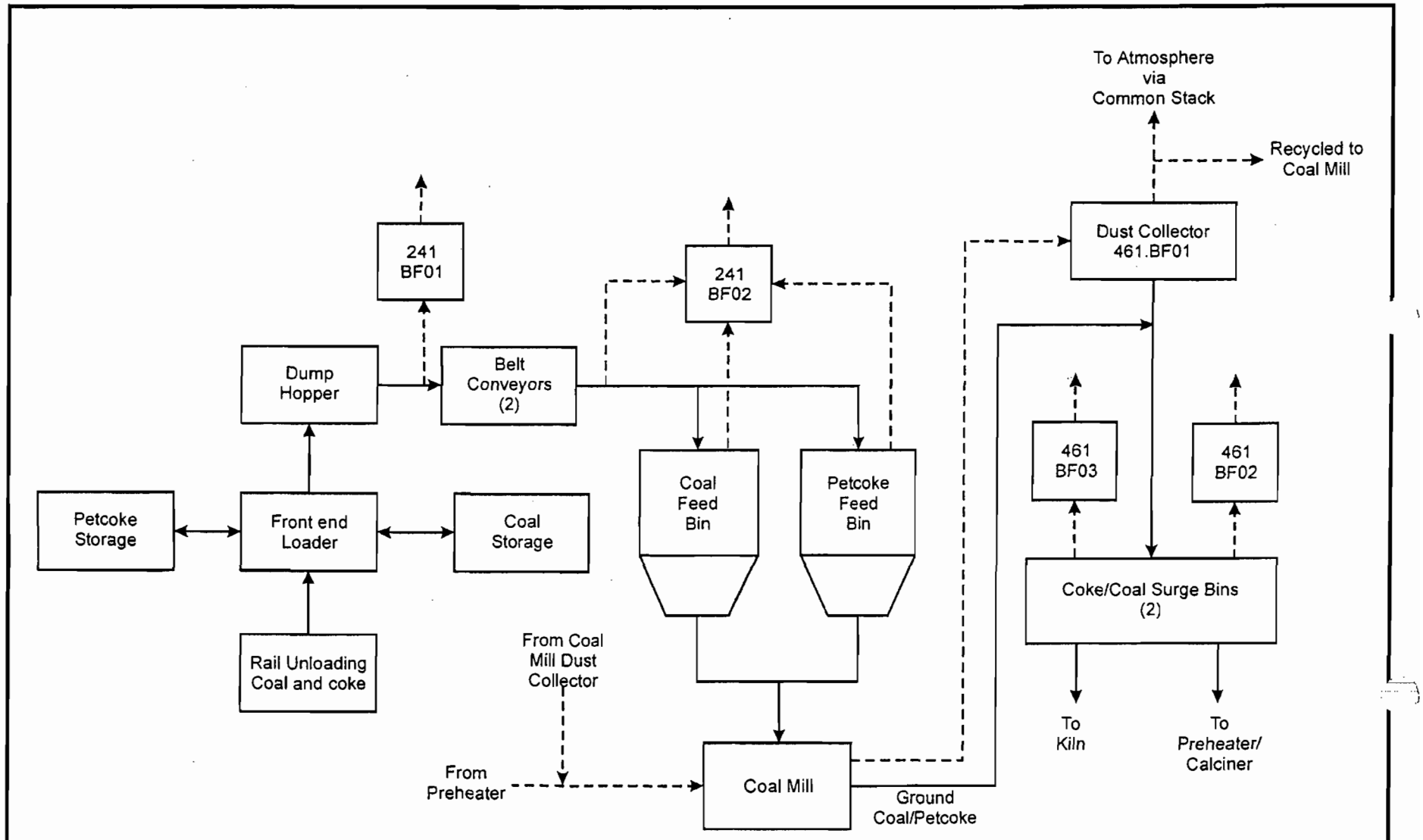
FULLER

No.: 1.598706 Rev



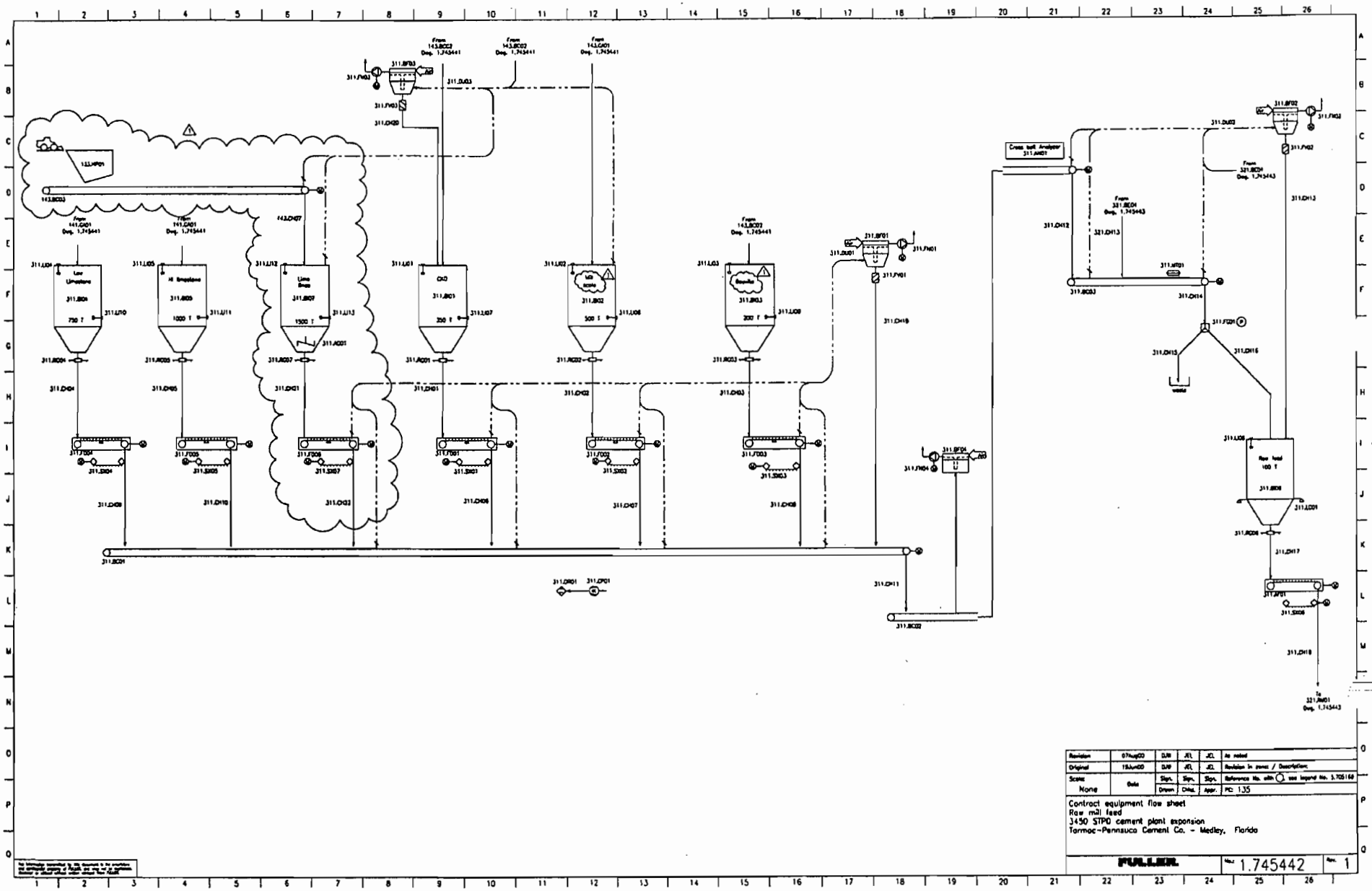
EQ Environmental Quality Management, Inc.
3325 Durham-Chapel Hill Blvd, Suite 250
Durham, North Carolina 27707

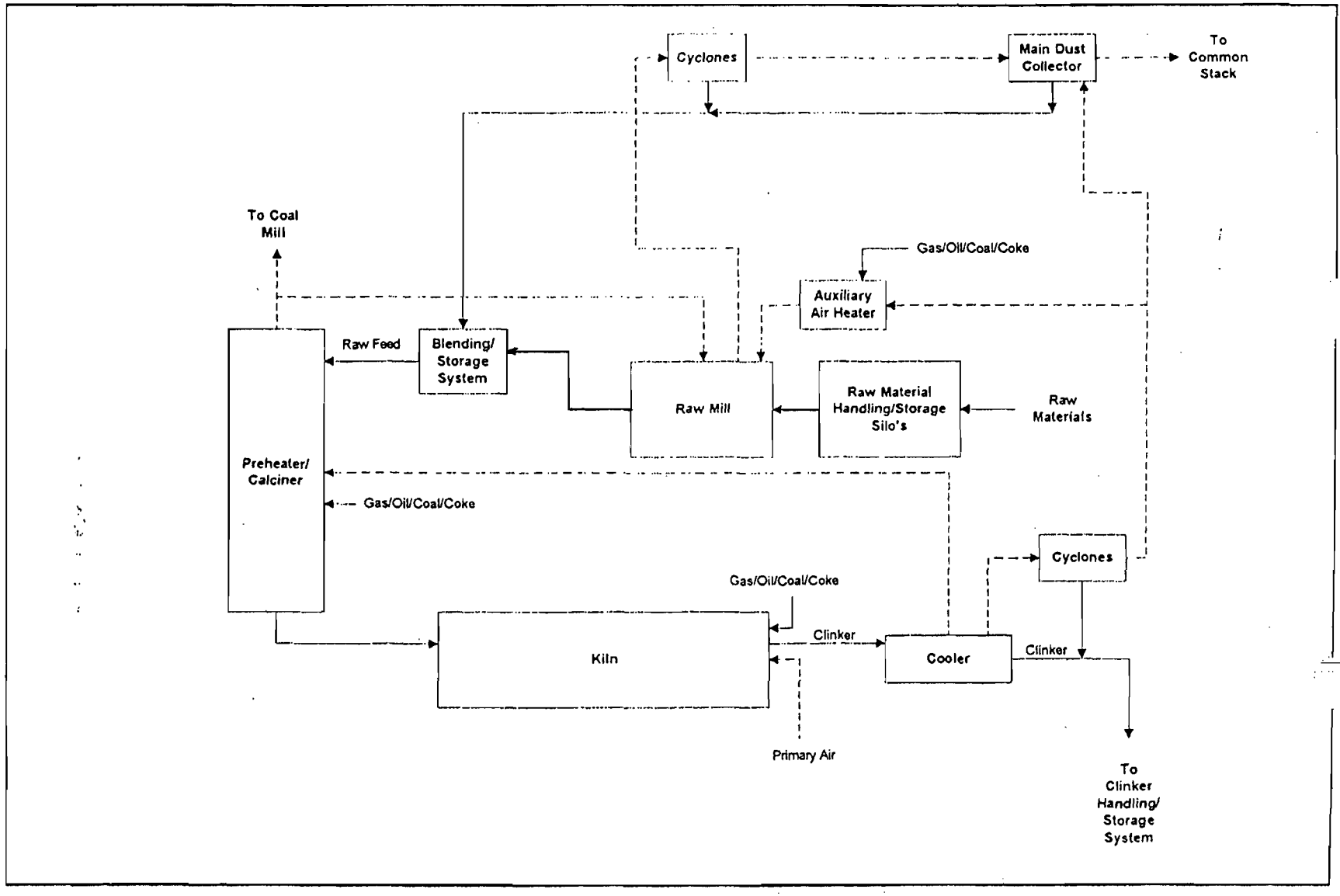
Process Flow Diagram
Tarmac Pennsuco Cement Company • Medley, FL



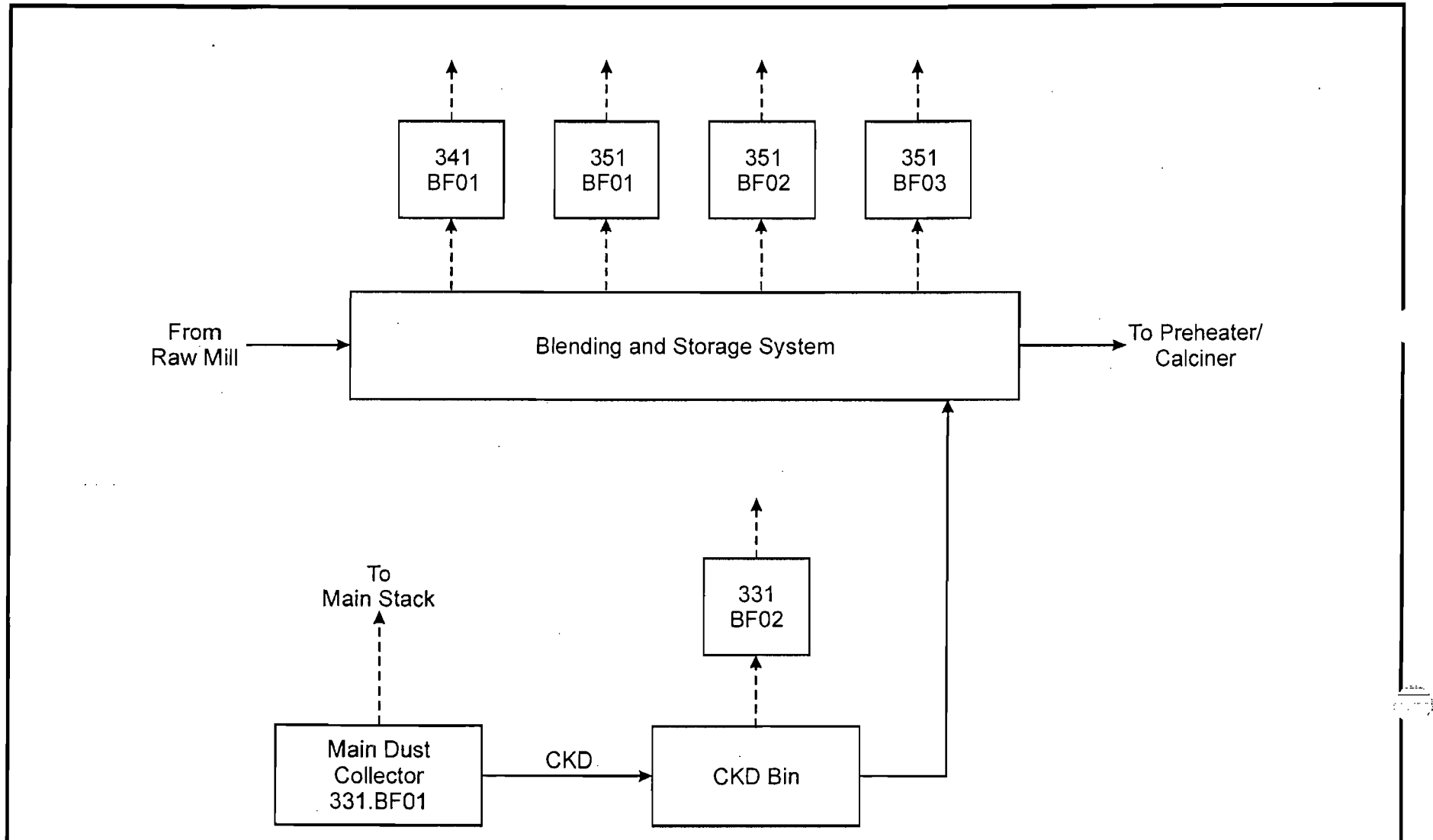
EQ Environmental Quality Management, Inc.
3325 Durham-Chapel Hill Blvd, Suite 250
Durham, North Carolina 27707

Coal Handling System • Process Flow Diagram
Tarmac Pennsuco Cement Company • Medley, FL


Low Limestone
750 T
Hi Limestone
1000 T
Lime Stone
1500 T
CKD
250 T
Mill Scale
500 T
Bauxite
200 T
Cross belt Analyzer
311.AM01
Raw feed
100 T
Contract equipment flow sheet
Raw mill feed
3450 STPD cement plant expansion
Tarmac-Pennsuco Cement Co. - Medley, Florida
FULLER
No. 1.745442
Rev. 1

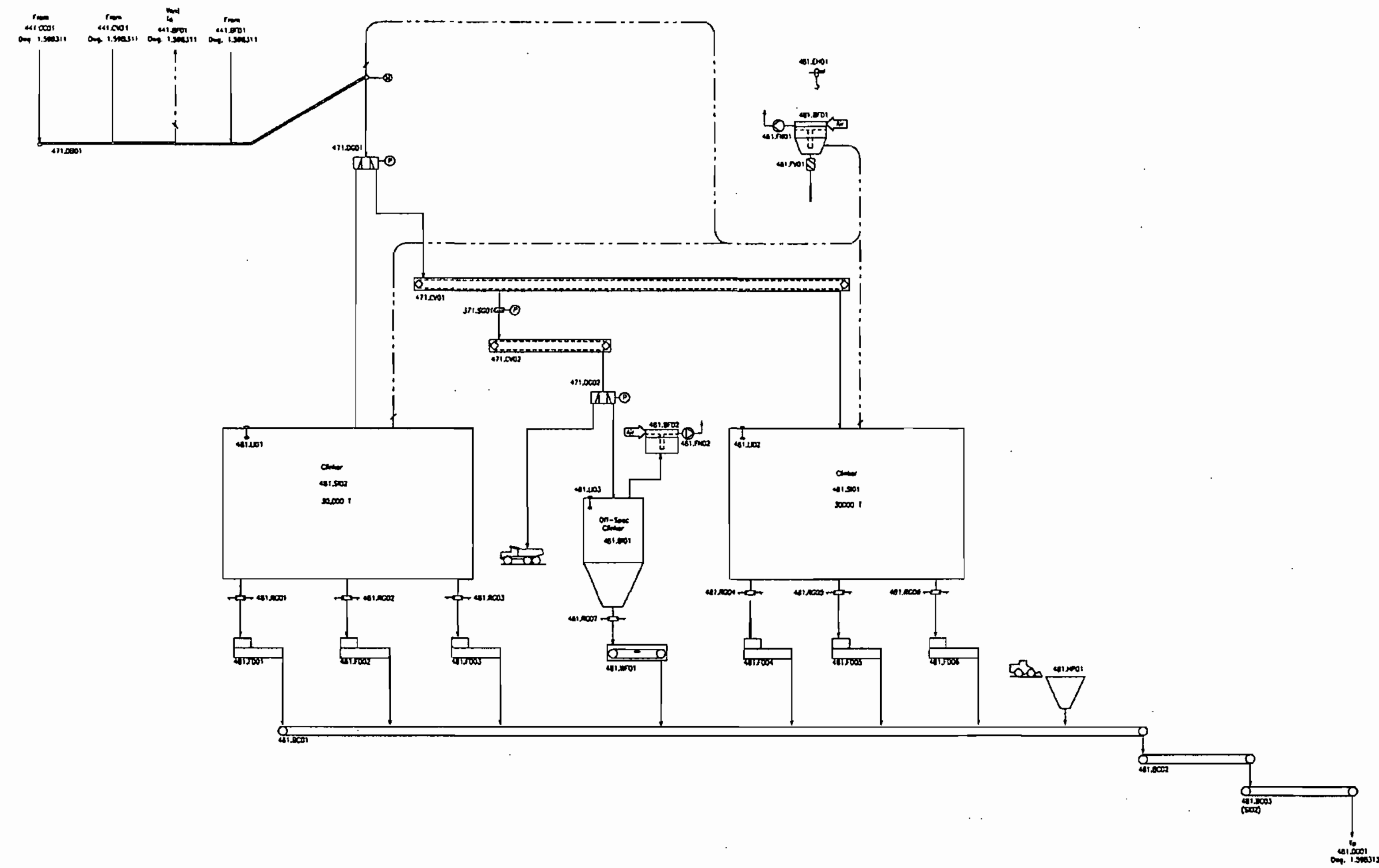


Emission Unit: RAW MILL/PYROPROCESSING



EQ Environmental Quality Management, Inc.
3325 Durham-Chapel Hill Blvd, Suite 250
Durham, North Carolina 27707

Unit 2R-Raw Mill and Pyroprocessing • Process Flow Diagram
Tarmac Pennsuco Cement Company • Medley, FL

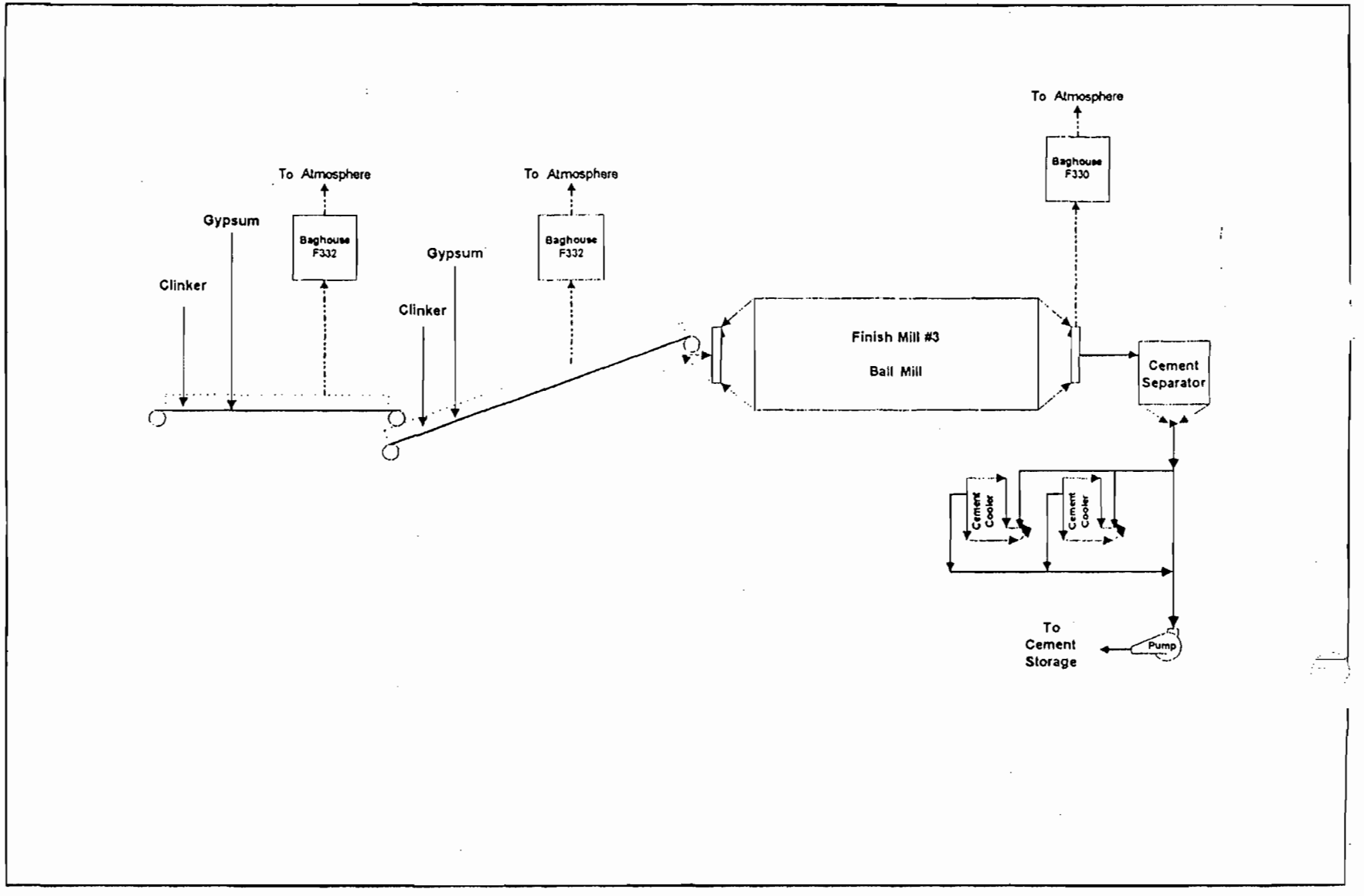


Revision	01Mar00				Deleted 481.DB01,02, Added 481.BC01,2,3
Original	29Sep00	DJW			Revision in zone: / Description:
Scale: None	Date	Sign. Drawn	Sign. Chkd.	Sign. Appr.	Reference No. with ○ see legend No. PC: 180

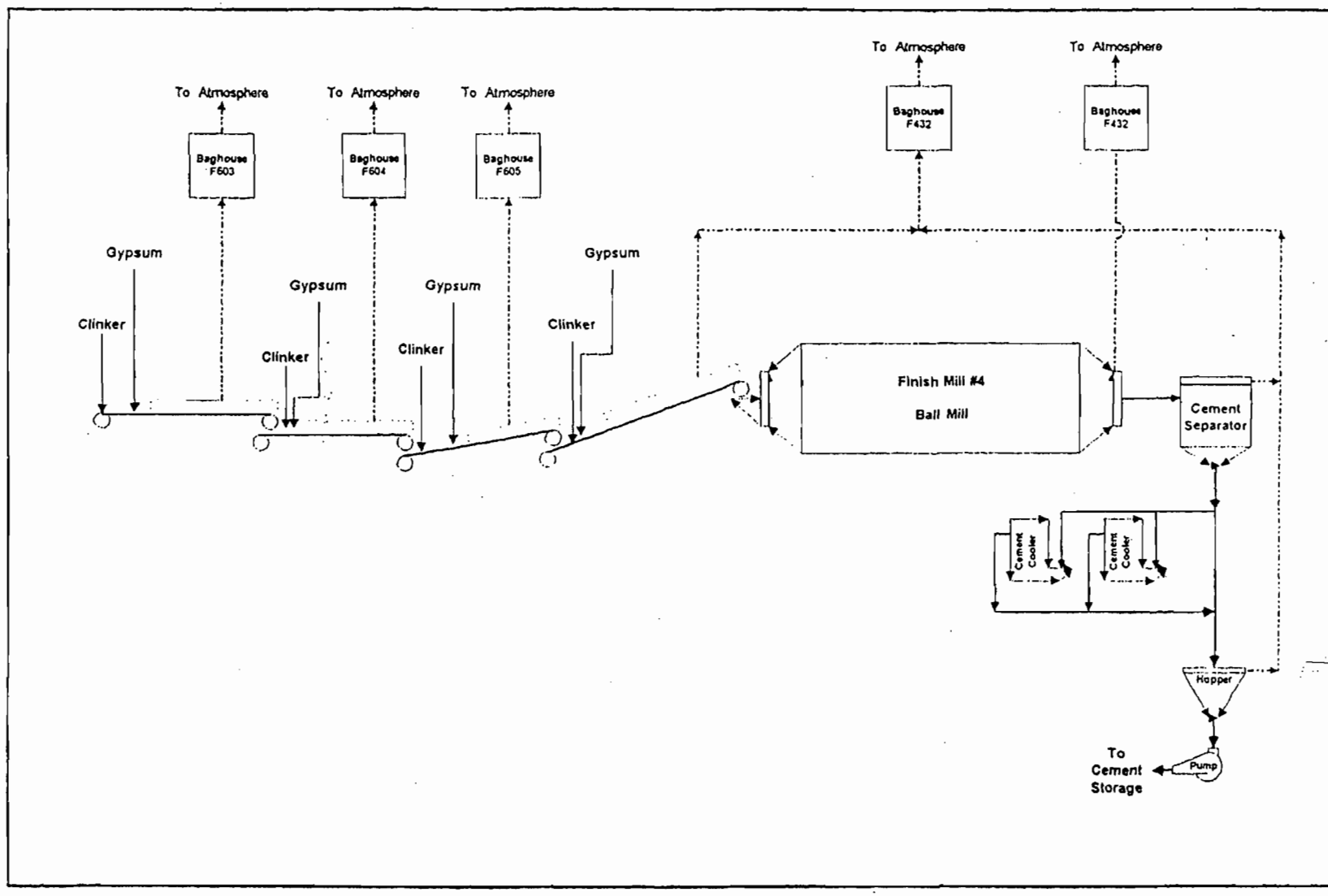
Proposed equipment flow sheet
Clinker storage and handling
5000 STPD cement plant expansion
Tarmac-Pennsuco Cement Co. - Medley, Florida

FULLER PROPOSAL

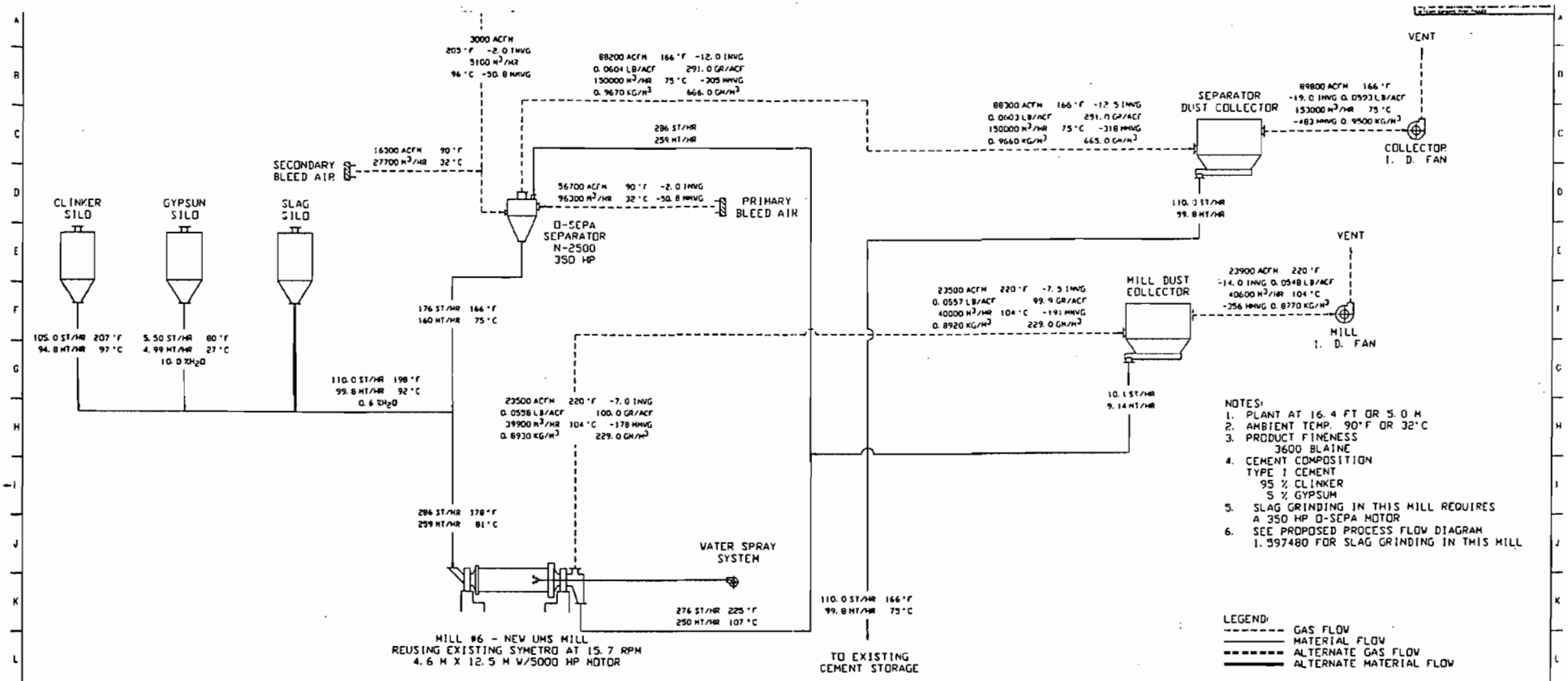
No. 1.598312 Rev. 3



Emission Unit: FINISH MILL #3



Emission Unit: FINISH MILL #4



NOTES:
1. PLANT AT 16.4 FT OR 5.0 M
2. AMBIENT TEMP. 90°F OR 32°C
3. PRODUCT FINENESS
   3600 BLAINE
4. CEMENT COMPOSITION
   TYPE I CEMENT
   95 % CLINKER
   5 % GYPSUM
5. SLAG GRINDING IN THIS MILL REQUIRES A 350 HP O-SEPA MOTOR
6. SEE PROPOSED PROCESS FLOW DIAGRAM 1.597480 FOR SLAG GRINDING IN THIS MILL

LEGEND:
- GAS FLOW
- MATERIAL FLOW
- ALTERNATE GAS FLOW
- ALTERNATE MATERIAL FLOW

VALUES ON LINES REPRESENT THEORETICAL FLOW RATES. EQUIPMENT RATINGS ARE SHOWN IN BLOCKS. ALL MATERIAL FLOW RATES ARE IN DRY TONS PER HOUR EXCEPT FOR WEIGHFEEDER RATINGS. ALL GAS FLOW RATES ARE SHOWN AS ACTUAL VOLUMES.

LBS/ACF AND KG/M³ - GAS DENSITY

GR/ACF AND GM/M³ - DUST DENSITY

EQUIPMENT RATINGS

WEIGHFEEDERS			BUCKET ELEVATOR	MILL DUST COLLECTOR	MILL I. D. FAN
CLINKER	GYPSUM	SLAG	MILL DISCHARGE		
140 ST/HR 127 MT/HR	12.0 ST/HR 10.9 MT/HR VET	70.0 ST/HR 63.5 MT/HR VET	360 ST/HR 327 MT/HR	25900 ACFM 220 °F -9.1 INWG 99 °F DEW PT. 99.9 GR/ACF 44000 M³/HR 104 °C -231 MMWG 37 °C DEW PT. 229.0 GM/M³ 6.5 %H2O BY VOLUME	26400 ACFM 220 °F -16.6 INWG 0.0544 LB/ACF 44800 M³/HR 104 °C -421 MMWG 0.8720 KG/M³

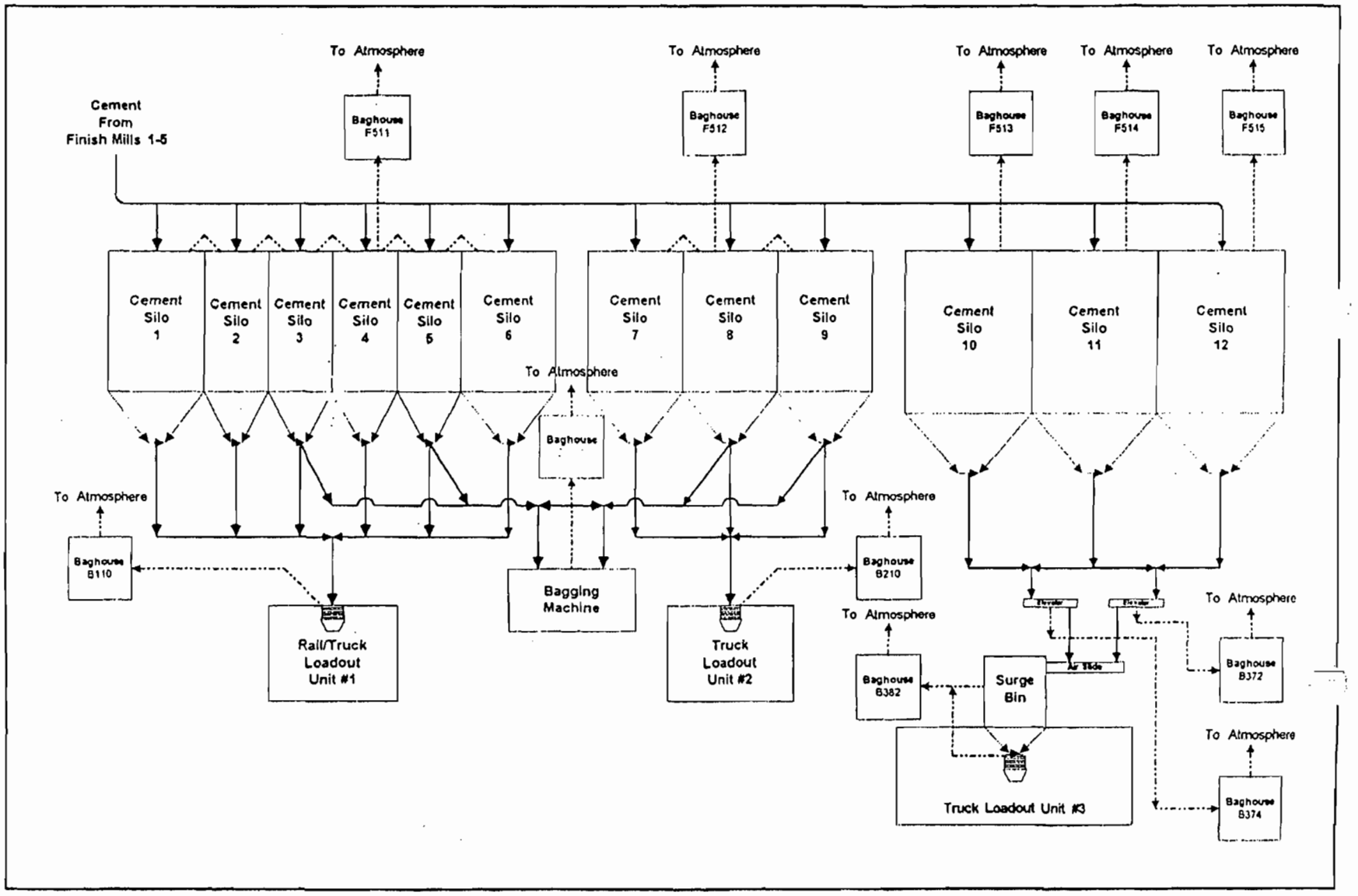
WATER SPRAY SYSTEM	FINISH MILL	SEPARATOR	SEPARATOR DUST COLLECTOR	COLLECTOR I. D. FAN	PRODUCT CONVEYING SYSTEM	PRIMARY BLEED AIR DAMPER	SECONDARY BLEED AIR DAMPER
MILL							
14.0 GAL/MIN 75 °F 53.0 LITERS/MIN 24 °C	110.0 ST/HR 99.8 MT/HR	110.0 ST/HR 99.8 MT/HR	97300 ACFM 166 °F -14.5 INWG 83 °F DEW PT. 290.0 GR/ACF 165000 M³/HR 75 °C -369 MMWG 28 °C DEW PT. 664.0 GM/M³ 4.0 %H2O BY VOLUME	99200 ACFM 166 °F -22.8 INWG 0.0588 LB/ACF 169000 M³/HR 75 °C -559 MMWG 0.9420 KG/M³	140 ST/HR 127 MT/HR	68000 ACFM 90 °F -2.0 INWG 116000 M³/HR 32 °C -50.8 MMWG	24500 ACFM 90 °F -2.0 INWG 41700 M³/HR 32 °C -50.8 MMWG

Original	QIAUGOO	BRL			Revision in zone / Description
Scale	Date	Sign.	Sign.	Sign.	Number with ○ see legend No.
NONE	Drawn		Chkd	Appr	PD 136

PROPOSED PROCESS FLOW DIAGRAM
110 STPH O-SEPA FINISH MILL SYSTEM (NEW MILL #6)
TARMAC AMERICA, INC. - TARMAC-PENNSUCO CEMENT CO.
MEDLEY, FLORIDA

FULLER PROPOSAL

Drawing Number 1.597478 Rev.



Emission Unit: CEMENT STORAGE/LOADOUT/PACKIN

ATTACHMENT B

LISTING OF EMISSION SOURCES AND CALCULATION OF POTENTIAL EMISSIONS

POTENTIAL EMISSIONS SUMMARY (TONS/YR)

Unit ID No.	Emisions Unit Description	PM	PM-10	SO2	NOX	CO	VOC	H2SO4
1R	Coal Handling System	16.74	14.06					
2R	Raw Mill & Pyroprocessing Unit	183.86	154.44	806.00	1,953.00	1,457.00	155.00	8.68
3R	Finish Mills	79.19	66.52					
4R	Clinker Handling & Storage	6.15	5.17					
5R	Cement Storage, Packhouse & Loadout	25.79	21.66					
6R	Raw Material Handling	13.00	10.92					
	Total	324.72	272.77	806.00	1,953.00	1,457.00	155.00	8.68
	Existing permit (see below)	330.20	299.51	806.00	1,953.00	1,457.00	155.00	8.68
	Net change	-5.48	-26.74	0.00	0.00	0.00	0.00	0.00
Allowable emissions from existing permit*								
	Kiln	204.60	173.91	806	1,953	1,457	155	8.68
	Other point	125.60	125.60					
	Total	330.20	299.51	806.00	1,953.00	1,457.00	155.00	8.68

* See permit Tables 1-1 and 1-2.

UNIT 1R - COAL HANDLING SYSTEM
POTENTIAL EMISSIONS

System	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Coal transfer	241.BF01	New	2,700	2,700	68	4,000		0.01	0.23	0.46	0.39	1
Coal transfer	241.BF02	New	6,400	6,400	68	4,000		0.01	0.55	1.10	0.92	2
Coal main	461.BF01	New	54,500	43,600	200	7,884		0.01	3.74	14.73	12.37	
Coal feeder	461.BF02	New	800	665	175	7,884		0.01	0.06	0.22	0.19	
Coal	461.BF03	New	800	665	175	7,884		0.01	0.06	0.22	0.19	
TOTAL									4.63	16.74	14.06	

Notes:
1 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses
2 Assumes PM-10 = 84% of PM for all baghouses

UNIT 2R - RAW MILL AND PYROPROCESSING UNIT
POTENTIAL EMISSIONS

System	Source	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Kiln/Cooler/Raw	Main stack	331.BF01	New	486,000	392,367	194	7,884		0.0132	44.39	175.00	147.00	1
Dust bin	Kiln dust	331.BF02	New	6,800	4,175	400	7,884		0.01	0.36	1.41	1.18	2
Blend silo		341.BF01	New	6,250	5,189	176	8,760		0.01	0.44	1.95	1.64	3
Raw meal	Preheat tower	351.BF01	New	6,200	5,147	176	7,884		0.01	0.44	1.74	1.46	
Raw meal	Preheat tower	351.BF02	New	3,000	2,491	176	7,884		0.01	0.21	0.84	0.71	
Raw meal	Preheat tower	351.BF03	New	10,400	8,634	176	7,884		0.01	0.74	2.92	2.45	
TOTAL										46.59	183.86	154.44	
Total, w/o kiln/cooler/raw										2.20	8.86	7.44	

Notes:

1 See "Main" sheet for basis of kiln stack PM emissions and other pollutants; flow based on raw mill operating
2 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses except main stack
3 Assumes PM-10 = 84% of PM for all baghouses

UNIT 2R - KILN, COOLER & RAW MILL
POTENTIAL EMISSIONS - MAIN STACK ONLY

Unit	Feed Throughput (tons/yr)	Clinker Production (tons/year)	PM Emission Factor (lb/ton KF)	PM Emissions tons/year	PM10 PM10 Fraction	PM10 Emissions tons/year	SO2 E. Factor Clinker (lbs/ton)	SO2 Emissions tons/year	NOX E. Factor Clinker (lbs/ton)	NOX Emissions tons/year	CO E. Factor Clinker (lbs/ton)	CO Emissions tons/year	VOCs E. Factor Clinker (lbs/ton)	VOCs Emissions tons/year	H2SO4 E. Factor Clinker (lbs/ton)	H2SO4 Emissions tons/year
Kiln/Cooler/ Raw Mill	2792250	1642500	0.125	175.00	0.84	147.00	0.981	806.00	2.38	1953.00	1.77	1457.00	0.189	155.00	0.011	8.68
TOTAL	**2792250**	**1642500**		**175.00**		**147.00**		**806.00**		**1953.00**		**1457.00**		**155.00**		**8.68**

Note: Emission estimates based on engineering design for new plant equipment

UNIT 3R - FINISH MILLS
POTENTIAL EMISSIONS

System	Source	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Finish Mills	FM #3	F330	Existing	20,000			8,760	0.01		1.71	7.51	6.31	1
Finish Mills	FM #3	F332	Existing	13,500			8,760	0.01		1.16	5.07	4.26	2
Finish Mills	FM #3	F313	Existing	8,000			8,760	0.01		0.69	3.00	2.52	
Finish Mill #4	Belt conv/separator	F432	Existing	17,000			8,760	0.01		1.46	6.38	5.36	
Finish Mill #4	Clinker/gyp conv	F605	Existing	4,000			8,760	0.01		0.34	1.50	1.26	
Finish Mill #4	Clinker/gyp conv	F603	Existing	8,000			8,760	0.01		0.69	3.00	2.52	
Finish Mill #4	Ball mill/mill sweep	F430	Existing	30,000			8,760	0.01		2.57	11.26	9.46	
Finish Mill #4	Clinker/gyp conv	F604	Existing	8,000			8,760	0.01		0.69	3.00	2.52	
Finish Mill #6	Main	531.BF01	New	97,300	80,905	175	8,760		0.01	6.93	30.37	25.51	3
Finish Mill #6	Sweep	531.BF02	New	25,900	21,536	175	8,760		0.01	1.85	8.09	6.79	
TOTAL										18.08	79.19	66.52	

Notes:

1 Grain loading 0.01 gr/acf proposed permit limits for all existing baghouses
2 Assumes PM-10 = 84% of PM for all baghouses
3 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses

UNIT 4R - CLINKER HANDLING & STORAGE
POTENTIAL EMISSIONS

System	Source	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Clinker transfer	Burner bldg	441.BF01	New	3,000	2,494	175	7,884		0.01	0.21	0.84	0.71	1
Clinker silo		481.BF01	New	10,000	8,315	175	7,884		0.01	0.71	2.81	2.36	2
Clinker transfer		481.BF02	New	3,000	2,494	175	8,760		0.01	0.21	0.94	0.79	
Clinker bins		481.BF03	New	5,000	4,157	175	8,760		0.01	0.36	1.56	1.31	
TOTAL										1.50	6.15	5.17	

Notes:
1 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses
2 Assumes PM-10 = 84% of PM for all baghouses

UNIT 5R - CEMENT STORAGE, PACKHOUSE & LOADOUT
POTENTIAL EMISSIONS

System	Source	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Cement Storage	Silos 1-6	F511	Existing	18,000			8,760	0.01		1.54	6.76	5.68	1
Cement Storage	Silos 7-9	F512	Existing	10,000			8,760	0.01		0.86	3.75	3.15	2
Cement Storage	Silo 10	F513	Existing	5,000			8,760	0.01		0.43	1.88	1.58	
Cement Storage	Silo 11	F514	Existing	5,000			8,760	0.01		0.43	1.88	1.58	
Cement Storage	Silo 12	F515	Existing	5,000			8,760	0.01		0.43	1.88	1.58	
Bulk Loadout	Unit 1	B110	Existing	3,000			8,760	0.01		0.26	1.13	0.95	
Bulk Loadout	Unit 2	B210	Existing	3,000			8,760	0.01		0.26	1.13	0.95	
Bulk Loadout	Unit 3 Line 1	B372	Existing	2,000			8,760	0.01		0.17	0.75	0.63	
Bulk Loadout	Unit 3 Line 2	B374	Existing	2,000			8,760	0.01		0.17	0.75	0.63	
Bulk Loadout	Unit 3 Line 3	B382	Existing	5,000			8,760	0.01		0.43	1.88	1.58	
Packhouse	Packhouse	New	New	23,400	23,400	68	4,000		0.01	2.01	4.01	3.37	3
TOTAL										6.98	25.79	21.66	

Notes:

1 Grain loading 0.01 gr/acf proposed permit limits for all existing baghouses
2 Assumes PM-10 = 84% of PM for all baghouses
3 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses

UNIT 6R - RAW MATERIAL HANDLING
POTENTIAL EMISSIONS

System	Source	Equip. ID No.	New or Existing	Flow acfm	Flow dscfm	Temp deg F	Hours hrs/yr	PM gr/acf	PM gr/dscf	Emissions PM lb/hr	Emissions PM ton/yr	Emissions PM-10 ton/yr	Note
Lime/gyp silos	(Existing silos)	232.BF01	New BH	5,170	5,170	68	4,000		0.01	0.44	0.89	0.74	1
Additives		311.BF01	New	11,000	11,000	68	7,884		0.01	0.94	3.72	3.12	2
Additives		311.BF02	New	6,050	4,840	200	7,884		0.01	0.41	1.64	1.37	
Additives		311.BF03	New	10,000	10,000	68	7,884		0.01	0.86	3.38	2.84	
Additives		311.BF04	New	10,000	10,000	68	7,884		0.01	0.86	3.38	2.84	
TOTAL										3.52	13.00	10.92	

Notes:
1 Grain loading 0.01 gr/dscf proposed permit limits for all new baghouses
2 Assumes PM-10 = 84% of PM for all baghouses

ATTACHMENT C

PERMIT NO. 0250020-008-AC DATED OCTOBER 21, 1999

MIAMI-DADE COUNTY, FLORIDA

MIAMI-DADE

DERM

ENVIRONMENTAL RESOURCES MANAGEMENT
AIR QUALITY MANAGEMENT DIVISION
33 S.W. 2nd AVENUE
SUITE 900
MIAMI, FLORIDA 33130-1540
TELEPHONE: (305) 372-6925
FAX: (305) 372-6954

October 21, 1999

CERTIFIED MAIL P 343 639 730
RETURN RECEIPT REQUESTED

PERMITTEE:

Tarmac America, Inc.
455 Fairway Drive
Deerfield Beach, Fl 33441

Permit No. 0250020-008-AC
Issue Date October 21, 1999
Expiration Date: October 20, 2002

Authorized Representative:
Scott Quaas
Environmental Manager

PROJECT AND LOCATION:

Project: The construction of a dry process portland cement plant with preheater/calciner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system. A new finish mill will be constructed in addition to the existing mills.
Facility Description: Portland Cement Plant (SIC # 3241)
Location: 11000 N.W. 121 Way, Miami-Dade County, Florida 33178
Lat./Long.: 25° 52' 30" N / 80° 22' 30" W
UTM: Zone 17; 562.8 Km. E; 2861.7 Km. N

Dear Mr. Quaas:

This is Permit Number 0250020-008-AC to construct an air pollution source issued by the **Miami-Dade County Department of Environmental Resources Management (DERM) pursuant to Chapter 24, Code of Miami-Dade County and Chapter 403.087, Florida Statutes (F.S.).** This is a new construction permit to authorize construction of the emissions units described in this permit.

The Florida Department of Environmental Protection (FDEP) has permitting jurisdiction under Section 403.087, Florida Statutes (F.S.). However, in accordance with Section 403.182, F.S., the FDEP recognizes the DERM as the approved local air pollution control program of Miami-Dade County. Through a Specific Operating Agreement, the FDEP delegated to the DERM the authority to issue or deny permits for this type of air pollution source located in Miami-Dade County.

NOTICE OF RIGHTS:

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 Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, at 33 SW 2nd Avenue, Suite 900, Miami, Florida 33130-1540 and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Order is filed with the Clerk of the DERM.

STATEMENT OF BASIS:

This permit is issued under the provisions of **Chapter 24, Code of Miami-Dade County, Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Rules 62-4, and 62-204 through 62-297**, and in conformance with all existing regulations of the FDEP and the DERM rules. The above named owner or operator is hereby authorized to perform the work or construct the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the DERM and made a part hereof and specifically described in this permit.

Attached appendices and Tables made a part of this permit:

Table 1-1	Allowable Opacity Limits
Table 1-2	Air Pollutants Standards and Terms
Table 2-1	Compliance Requirements
Appendix A	General Conditions
Appendix B	National Emission Standards for Hazardous Air Pollutants for the Portland Cement Plant

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

The currently permitted Tarmac facility consists of: cement distribution rail truck loadouts and packhouse with two baggers, coal handling system, twelve cement storage silos serving mills 1 through 4, slag dryer, insuflation system, cement plant, ready mix plant, three kilns, three coolers, four finish mills with airslides, conveyors and dust collectors, clinker handling and storage system. This permit is for the construction of a dry process portland cement plant with preheater/calciner/kiln, cooler, coal mill and raw mill to replace existing kilns and coolers system, capable of producing upto 160 tons per hour, and approximately 1,240,000 tons per year (TPY) of clinker. A new finish mill will be constructed in addition to the existing mills.

EMISSION UNITS

This permit addresses the following emission units:

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
ARMS No. 003	Coal Handling	Coal Mill, Pet Coke Feed Bin, Coal Feed Bin Coal Handling and Storage (Fugitive)
ARMS No. 021	Raw Mill/Pyroprocessing Unit	Pyroprocessing consist of the Preheater/Calciner, Kiln, Cooler and Raw Mill
ARMS No. 010, 011,012, 13 and 022	Finish Mill #1 - #5	Finish Mill # 1- #5 and associated conveyors, separators and coolers.
ARMS No. 008 & 009	Clinker Handling and Storage	Clinker Silos 1,2,4,5,11,12, 18-28 and Slag Dryer
ARMS No. 014, 015 and 016	Cement Storage, Packhouse & Loadout	Cement Silos 1-12, Bulk Loadout Unit #1,#2 and #3 and Packhouse

SUBSECTION B. REGULATORY CLASSIFICATION

The Tarmac America Pensuco Cement Plant directly emits more than 100 tons per year (TPY) of several regulated air pollutants and emits over 10 TPY of at least one hazardous air pollutant. Therefore it is classified as a "Major Source of Air Pollution or Title V Source," per the definitions in **Rule 62-204.200, F.A.C.**

This industry is listed in Table 62-212.400-1 of Chapter 62-212, F.A.C., "Major Facility Categories." Therefore, stack and fugitive emissions of over 100 TPY of carbon monoxide, volatile organic compounds, sulfur dioxide, nitrogen oxides, or particulate matter characterize the installation as a major facility per the definitions in **Rule 62-210.200, F.A.C.**

The facility is also subject to 40 CFR Subpart F, New Source Performance Standards (NSPS) for Portland Cement Plants, incorporated by reference in **Rule 62-204.800, F.A.C.** and 40 CFR 63, Subpart LLL, Portland Cement Manufacturing Plant

SIGNIFICANT DATES:

Public Notice of Intent Published: April 14, 1999
Additional Information Received: December 1, 1998
Application Received: June 30, 1998

SECTION II. FACILTY-WIDE CONDITIONS

SUBSECTION A. ADMINISTRATIVE

A.1 Regulating Agencies: All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Air Division of the Dade County Department of Environmental Resources Management (DERM), Suite 900, 33 Southwest Second Avenue, Miami, Florida 33130-1540.

A..2 Specific and General Conditions: The owner or operator shall be subject to the specific and general conditions of this permit and the owner or operator shall be aware of, and operate under, the attached General Conditions, attached as Appendix A of this permit. General Conditions are binding and enforceable pursuant to **Chapter 403, F.S. [F.A.C. Rule 62-4.160]**

A.3 Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

A.4 Forms and Application Procedures: 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. **[Rule 62-210.900, F.A.C.]**

A.5 Expiration: This air construction permit shall expire on October 20, 2002 **[Rule 62-210.300(1), F.A.C.]**. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the DERM of any delays in completion of the project which would affect the startup day by more than 90 days. **[Rule 62-4.090, F.A.C]**

A.6 Other Permits: This air pollution permit does not preclude the owner or operator from obtaining any other types of required permits, licenses or certifications from the DERM or other departments or agencies.

A.7 Title V Permit is Required: This permit authorizes construction and/or installation of the permitted emission units and initial operation to determine compliance with the FDEP and the DERM rules. An application for a Title V operation permit must be submitted to the Miami-Dade County Department of Environmental Resources Management, Air Facilities Section, **90 days before the expiration date of this permit, but no later than 180 days after commencing operation.** To apply for a Title V operation permit, the applicant shall submit the appropriate application form, and such additional information as the DERM may by law require. **[F.A.C. Rule 62-4.030, 62-4.050, and 62-213.420(1)(a)2.]**

A.8 Applicable Regulations: Unless otherwise indicated, the construction of a dry process Portland Cement Plant and associated equipment shall be in accordance with the capacities and specifications stated in the application. This facility is subject to all applicable provisions of Chapter 403, F.S and Florida Administrative Code Chapters 62-4; 62-103; 62-204, 62-210.

62-212, 62-213, 62-296, 62-297; and the Code of Federal Regulations Section 40, Part 60. Specifically, this facility is subject to the New Source Performance Standards (NSPS) for Portland Cement Manufacturing Plant identified by the Code of Federal Regulations Section 40 Part 60, Subpart F and National Emission Standards for Hazardous Air Pollutants for Portland Cement Plant, 40 CFR 63, Subpart LLL Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. **[Rule 62-210.300, F.A.C.]**

A.9 Chapter 24-Code of Metropolitan Dade County. This facility is subject to all applicable requirements of this Chapter.

SUBSECTION B. EMISSION LIMITING STANDARDS

B.1 General Visible Emissions Standard: **[Rule 62-296.320 (4)(b)1 & 4. F.A.C.]** Unless otherwise specified by rule or permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere any air pollutants from new or existing emissions units, the opacity of which is equal to:

- Visible emissions from PM sources shall not exceed 20% opacity.

B2 Unconfined Emissions of Particulate Matter **[Rule 62-296.320(4)(c)2, F.A.C.]**

(a) The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any source whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

(b) Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.

(c) Reasonable precautions may include the following:

1. Paving and maintenance of roads, parking areas and yards.
2. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
3. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
4. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
5. Landscaping or planting of vegetation.
6. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
7. Confining abrasive blasting where possible.
8. Enclosure or covering of conveyor systems.

In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the

technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

NOTE: Facilities that cause frequent, valid complaints may be required by the DERM, Air Facilities Section to take these or other reasonable precautions. In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

B.3 General Pollutant Emission Limiting Standards:

(a) 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 emissions control devices or systems deemed necessary and ordered by the Department.**[Rule 62-296.320 (1)(a), F.A.C.]**

(b) No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

NOTE: An objectionable odor is defined as 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. **[Rule 62-296.320 (2), F.A.C.]**

SUBSECTION C. OPERATION AND MAINTENANCE

C.1 Changes/Modifications: The owner or operator shall submit to the DERM, Air Facilities Section, for review and obtain approval for any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain an air construction permit prior to making the desired change. **[Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]**

C.2 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the owner or operator shall notify the DERM, Air Facilities Section as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the 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 and the regulations. **[Rule 62-4.130, F.A.C.]**

C.3 Circumvention: The owner or operator shall not circumvent any air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. **[Rules 62-210.650, F.A.C.]**

C.4 Excess Emissions Requirements **[Rule 62-210.700, F.A.C.]**

(a) Excess emissions resulting from start-up, shutdown or malfunction of these emissions units 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 DERM, Air Facilities Section for longer duration. **[Rule 62-210.700(1), F.A.C.]**

(b) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited. **[Rule 62-210.700(4), F.A.C.]**

(c) In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Air Facilities Section of the DERM within one (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the problem; and the corrective actions being taken to prevent recurrence. **[Rule 62-210.700(6), F.A.C.]**

SUBSECTION D. MONITORING OF OPERATIONS

D.1 Determination of Process Variables:

(a) The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. **[Rule 62-297.310 (5), F.A.C.]**

(b) Equipment and/or instruments used to directly or indirectly determine such 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]**

SUBSECTION E. TEST REQUIREMENTS

E.1 Test Performance Within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after initial startup up and annually thereafter, (except for VOC), the owner or operator shall simultaneously conduct performance test(s) for PM/PM_{10}, NO_X, SO_2 , CO, VE and VOC (initial) pursuant to 40 CFR 60.8, Performance Tests, Rule 62-296.310 F.A.C., 40 CFR 60, Appendix A and 40 CFR 51,Appendix M. No other test method shall be used unless approval from the Department has been received in writing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emission unit(s) operating at permitted capacity pursuant to Rule 62-297.310(2).F.A.C. **[Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, F.A.C.]**

E.2 Test Procedures and Test Reports shall meet all applicable requirements of the Florida Administrative Code Chapter 62-297. **[Rule 62-297.310 (4), F.A.C.]**

E.3 Test Notification: The owner or operator shall notify the DERM, Air Facilities Section in writing at least (30) days (initial) and (15) days (annual) prior to conducting each scheduled compliance test. The notification shall include the test date, the expected test time, the facility contact person for the test, and the person or company conducting the test. **[Rule 62-297.310 and 40 CFR 60.8, F.A.C.]**

E.4 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 Rule 62-204 through 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the DERM., Air Facilities Section. **[Rule 62-297.310(7)(b), F.A.C.]**

E.5 Stack Testing Facilities: The owner or operator shall install stack testing facilities in accordance with **Rule 62-297.310(6), F.A.C.**

E.6 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in **Rule 62-297.620, F.A.C.**

SUBSECTION F. REPORTS AND RECORDS

F.1 Duration: All reports and records required by this permit shall be kept for at least (5) years from the date the information was recorded. **[62-4.160(14)(b), F.A.C.]**

F.2 Emission Compliance Stack Test Reports

(a) A *test report* indicating the results of the required compliance tests shall be filed with the DERM, Air Facilities Section as soon as practical, but no later than 45 days after the last sampling run is completed. **[Rule 62-297.310, F.A.C.]**

(b) The *test report* shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in **Rule 62-297.310 (8), F.A.C.**

F.3 Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Air Facilities Section of the DERM, within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7. **[Rules 62-4.130 and 62-210.700(6), F.A.C.]**

F.4 Annual Operating Report for Air Pollutant Emitting Facility. Before March 1st of each year, the owner or operator shall submit to the Department this required report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year. **[Rule 62-210.370(3), F.A.C.]**

F.5 This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance (O&M) log to include, at a minimum, the following information:

(1) Calibration logs for all emission measuring instruments.

(2) Maintenance/repair logs for any work performed on equipment or emission measuring instrument which is subject to this permit.

(3) All measurements, records, and any other data required to be maintained by Tarmac shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. These data shall be made available to the DERM or the FDEP staff upon request.

SUBSECTION G. OTHER REQUIREMENTS

G.1 Used Oil and Grease: Used oil and grease burned at this facility shall not be a hazardous waste as defined by 40 CFR Part 261.3 or Rule 62-730.030, F.A.C. It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. These fuels shall be burned in compliance with Section 403.769(3), Florida Statutes.

G.2 Other Regulations: The owner or operator shall comply with applicable provisions of Rule 62-710, Used oil Management and 40 CFR Parts 279, Standards for the Management of Used Oil.

G.3 **No Hazardous wastes or hazardous materials shall be stored, collected, handled or burned in the new pyroprocessing system.**

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS

SUBSECTION A. COMMON CONDITIONS: 40 CFR 60 NEW SOURCE PERFORMANCE STANDARDS

EMISSION UNITS

This section addresses the following emission units.

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
ARMS No. 003	Coal Handling	Coal Mill, Pet Coke Feed Bin, Coal Feed Bin
ARMS No. 021	Raw Mill/Pyroprocessing Unit	Pyroprocessing consist of the Preheater/Calciner, Kiln, Cooler and Raw Mill
ARMS No. 010, 011,012, 013 and 022	Finish Mill #1 - #5	Finish Mill # 1- #5 and associated conveyors, separators and coolers.
ARMS No. 008 & 009	Clinker Handling and Storage	Clinker Silos 1,2,4,5,11,12, 18-28 and Slag Dryer
ARMS No. 014, 015 and 016	Cement Storage, Packhouse & Loadout	Cement Silos 1-12, Bulk Loadout Unit #1,#2 and #3 and Packhouse

These emission units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart A, adopted by reference in Rule 62-204.800(7), F.A.C.

A.1 [40 CFR 60.7, Notification and record keeping]
A.2 [40 CFR 60.8, Performance tests]
A.3 [40 CFR 60.11, Compliance with standards and maintenance requirements]
A.4 [40 CFR 60.12, Circumvention]
A.5 [40 CFR 60.13, Monitoring requirements]
A.6 [40 CFR 60.19, General notification and reporting requirements]

This cement plant shall comply with all applicable provisions of the 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants, 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants and 40 CFR 63, Subpart LLL, Portland Cement Manufacturing Plant.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emission units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
ARMS No. 003	Coal Handling	Coal Mill, Pet Coke Feed Bin, Coal Feed Bin Coal Handling System and Storage

The existing rail delivery system for coal, consisting of a rail dump operation, temporary and active coal storage piles, and coal hopper, will be used for the new plant. Petroleum coke will be utilized as fuel, and will handled in the same matter as coal. The proposed coal mill system will consist of a Fuller coal mill, which will grind up to 23 TPH of coal, a conveyor, two feed bins, and two storage bins, one for the kiln fuel and one for the calciner fuel. The raw lump coal/petcoke is fed to the coal mill where the coal/petcoke is ground and dried by hot preheater gas. The exhaust gases from the mill exits to a baghouse dust collector. The entrained coal/petcoke dust is removed in the dust collector and the cleaned gas is vented to the atmosphere via the plant common stack. The coal/petcoke is then transferred to storage bins. From the storage bins, the fuel is pneumatically conveyed to the kiln and calciner burners.

This emission unit shall comply with all applicable provisions of the 40 CFR 60 Subpart Y New Source Performance Standards for Portland Cement Plants, Subpart F. **[Rule 62-204.800(7)(b)8., F.A.C]**

EMISSION LIMITATIONS

B.1 The maximum allowable emission rates for the coal handling system shall not exceed the limits listed in Table 1-1, Air Pollutant Standards and Terms (attached). **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

B.2 In order to minimize excess emissions during startup/shutdown/malfunction this emission units shall adhere to best operational practices. **[Rule 62-210.700, F.A.C. and 40 CFR 60.7]**

OPERATIONAL LIMITATIONS

B.3 This emission unit is allowed to operate continuously (8760 hours/year) **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

B.4 The coal handling maximum production rate reflects coal/petroleum coke throughput and shall not exceed 176,080 TPY. **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

B.5 The coal handling maximum hourly rate reflects coal/petroleum coke shall not exceed 23 TPH average rate. **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

TEST METHODS AND COMPLIANCE PROCEDURES

B.6 Particulate and fugitive emissions from coal handling facilities shall be minimized by following the procedures listed below: **[Rule 62-296.320(4)(c), F.A.C.]**

(1) All conveyers and transfer points shall be enclosed or covered to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).

(2) Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.

(3) Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc., during dry periods as necessary to all facilities to maintain an opacity of less than 20 percent at the property line for fugitive emission sources.

SUBSECTION C. SPECIFIC CONDITIONS:

The following Specific Conditions apply to the following emission units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
ARMS No. 021	Raw Mill/Pyroprocessing Unit	Pyroprocessing consist of the Preheater/Calciner, Kiln, Cooler and Raw Mill.

The proposed raw material mill system consist of a vertical roller mill capable of grinding up to315.6 TPH of raw feed (limestone and fly ash). The raw mill will use hot preheater and cooler gases to dry the material from a feed moisture of 12% to a moisture of less than 1%. An auxiliary air heater is provided at the raw mill to provide additional heat for drying. The maximum heat input to the heater is 88 MMBtu/hr. The raw mill is vented to cyclones and then to the main plant dust collector (baghouse) to remove entrained product. The product from the cyclones and dust collector is combined and conveyed to the storage and blending silo., while the cleaned gas is vented to the atmosphere through the plant common stack.

The proposed pyroprocessing system will be capable of producing up to 160 TPH, and 1,240,000 TPY of clinker. The raw feed is introduced to the five-stage preheater/calciner from the raw mill. The feed is preheated in the first four stages using hot gases from the calciner/kiln. The fifth stage is the calciner, where the fuel is burned to achieve approximately 90% of the total material calcination. The maximum heat input to calciner is 252 MMBtu/Hr. The calcinated feed then enters the kiln, where the remaining calcination takes place. Maximum heat input to the kiln is 228 MMBtu/hr. The calciner exit gas is recycled to the raw and coal mills. The rotary kiln delivers hot clinker at approximately 1450 degrees Celsius to the cooler.

The proposed cooler utilizes fans to force ambient air through the hot clinker bed to cool the hot clinker to 65 degrees Celsius above the ambient temperature. Combustion air required in the kiln and calciner is obtained from the cooler exhaust gases, while the rest of the gas is passed through cyclones to remove entrained clinker dust before recycle of the gases to the raw mill.

Control equipment for the raw mill/preheater/calciner/kiln/cooler:

The particulate emissions will be controlled by a reverse-jet fabric filter or approved equivalent. The design gas volume is 359,000 acfm at 181 °F while the raw mill is operating and 446,200 acfm at 500 °F while raw mill is down. The filter area has not been determined, and at design gas volume, the air-to-cloth ratio will be approximately 2.0 acfm/ft².

This emission unit shall comply with all applicable provisions of the 40 CFR 63 New Source Performance Standards for Portland Cement Plants, Subpart LLL.

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

EMISSION LIMITATIONS

C.1 The maximum allowable emission rates for the kiln, clinker cooler, raw mill, and preheater/precalciner shall not exceed the limits listed in Table 1-2, Air Pollutant Standards and Terms (attached). **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

C.2 In order to minimize excess emissions during startup/shutdown/malfunction this emission units shall adhere to best operational practices. **[Rule 62-210.700, F.A.C. and 40 CFR 60.7]**

C.3 The emission standard for sulfur dioxide is 0.8 lb/MMBtu for liquid fuel and 1.2 lb/MMBtu for solid fuel based on a 24 hour average. **[Miami-Dade County, Chapter 24-17(2)(b)(i)]**

OPERATIONAL LIMITATIONS

C.4 This emission unit is allowed to operate continuously (8760 hours/year) **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

C.5 The kiln clinker production rate shall not exceed 160 tons per hour (TPH). **[Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]**

C.6 **Fuel Combustion**

(1) Fuels fired in the pyroprocessing system (kiln and precalciner) shall not exceed a total heat input rate of 568 MMBtu/hr and shall consist of: bituminous coal, natural gas, petroleum coke, No. 2 fuel oil, on-specification and off-specification used oil.

Use of fuels other than those listed above is prohibited.

COAL AND PETROLEUM COKE

(2) The coal usage rate shall not exceed 23 TPH based on a 24-hour average. The petroleum coke usage rate shall not exceed 20 TPH on a 24 hour basis.

USED OIL

(3) The constituents and properties of the *on-spec used oil* shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.10 (July 1, 1996 version), which is adopted by reference in **Rule 62-730.181, F.A.C.**

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	140 ° F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm

(4) *On-specification used oil* burned at this facility shall not be a hazardous waste as defined by Rule 62-730.030, F.A.C., or 40 CFR Part 261 (July 1, 1996 version). It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. The on-spec used oil shall be burned in compliance with Section 403.769(3), F.S.

(5) *Off-specification used oil* burned at this facility shall not be a hazardous waste as defined by Rule 62-730.030, F.A.C., or 40 CFR Part 261 (July 1, 1996 version). It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. The off-spec used oil shall be burned in compliance with Section 403.769(3), F.S.

(6) Any *on and off-specification used oil samples as required by Specific Condition No. C.6(3),(4) and (5) and C.23 shall be analyzed by EPA Recommended Analytical Procedures for Used Oil for the following constituent/property, associated unit, and using the test methods indicated:*

Constituent/Property	Units	Test Methods
Cadmium	ppm	EPA SW-846(6010)
Arsenic	ppm	EPA SW-846(6010)
Chromium	ppm	EPA SW-846(6010)
Lead	ppm	EPA SW-846(6010)
Total Halogens	ppm	EPA SW-846(9252)
Sulfur	percent	ASTM D129 or ASTM D1552
Flash Point	degree F	EPA SW-846(1010)
Heat of Combustion	Btu/gal	ASTM D240
Density	lbs/gal	
Polychlorinated Byphenyls (PCB's)	ppm	EPA SW-846(0010) and EPA 680
Ash		

NOTE: Other test methods may be used only after receiving written prior approval from the Department.

C.7 Any other operating parameters (including control equipment operating parameters) established during compliance testing and/or inspection that will confirm the proper operation of each emission unit shall be included in the operating permit **[Rule 62-297.310, F.A.C. and 62-4.070(3), F.A.C.]**

MONITORING OF OPERATIONS

C.8 The owner or operator shall record the daily production and the preheater-kiln system feed rate. The permittee may establish a relationship between material feed rates and production rates of clinker if material feed rates are measured more accurately than clinker production rates and the relationship is accurate within 10%. **[Rule 62-204.800(7)(b)9., F.A.C., 40 CFR 60.63(a)]**

C.9 As required by 40 CFR 60.63(b), the owner or operator shall install, calibrate, maintain, and operate in accordance with 40 CFR 60.13 a *continuous opacity monitoring system* to measure the opacity of emissions from the cement kiln and clinker cooler control device stack. **[Rule 62-204.800(7)(b)9., F.A.C.]**

CONTINUOUS EMISSIONS MONITORING SYSTEM (CEMS)

C.10 Continuous process monitors shall be installed for CO or O_2 to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_X, and SO_2. **[Rule 62-4.070(3) F.A.C.]**

C.11 A continuous emissions monitoring system (CEMS) shall be installed, calibrated, maintained, operated, and used to determine compliance with the emissions limits for NO_X and SO_2 in Table 1-2. CEMS shall be installed and certified, before the initial performance test, and operated in compliance with 40 CFR 60, Appendix F, Quality Assurance Procedures (1996 version) or other Department-approved QA plan; 40 CFR 60, Appendix B, Performance Specification 1, 2, and 3 (1996 version). **[Rules 62-4.070 (3) and 62-204.800, F.A.C.]**

C.12 The CEMS shall calculate and record emission rates in units of pounds of NO_X and SO_2 per hour.

Every day, the 24-hour average NO_X and SO_2 emission rate for the previous day shall be calculated. Emissions shall be calculated in units of pounds per hour and pounds per ton of clinker. Daily averages are to be calculated as the arithmetic mean of each monitored operating hour. A monitored operating hour is each hour in which fuel is fired in the unit and at least two emission measurements are recorded at least 15 minutes apart. Data taken during periods of startup, or when fuel is not fired to the unit, or when the CEMS is not calibrated shall be excluded from the daily average.

To the extent the monitoring system is available to record emissions data, the CEMS shall be operated and shall record data at all operating hours when fuel is fired in the unit, including periods of startup, shutdown, load change, continuous operation and malfunction.

Opacity monitor downtimes and excess opacity emissions, which include startup emissions, shall be reported on a quarterly basis using the SUMMARY REPORT in 40 CFR 60.7. A detailed report of the cause, duration, magnitude, and corrective action taken or preventative measures adopted for each excess emission occurrence, and a listing of monitor downtime occurrences shall accompany the

SUMMARY REPORT when the total duration of excess emissions is 1% or greater or if the monitoring system downtime is 5% or greater of the total monitored operating hours.

C.13 The monitoring device shall meet the applicable requirements of Chapter 62-204, F.A.C., 40 CFR 60, Appendix F, and 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) Notification Requirements. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirements, and the proposed location of each monitor shall be provided to ***DERM*** for review at least 45 days prior to replacement of a any CEMS. **[Rule 62-4.070 (3) F.A.C and Rule 62-204.800, F.A.C.]**

TEST METHODS AND PROCEDURES

C.14 For emissions other than NO_X and SO_2, compliance with the allowable emission limiting standards listed in Table 1-2 shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A (1996, version) and 40 CFR 61 Appendix B 1996, version) adopted by reference in Chapter 62-204, F.A.C.

Method 5	Determination of Particulate Matter Emissions from Stationary Sources.
Method 7 or 7 e	Determination of Nitrogen Oxide Emissions from Stationary Sources
Method 8	Determination of Sulfuric Acid Mist from Stationary Sources.
Method 9	Visual Determination of the Opacity of Emissions from Stationary Sources.
Method 10	Determination of Carbon Monoxide Emissions from Stationary Sources.
Method 23	Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans from Stationary Sources
Method 25 or 25A	Determination of Volatile Organic Compound Emissions from Stationary Sources.
Method 29	Determination of Lead, Beryllium, and Mercury from Stationary Sources.

Note: PM10 will be tested pursuant to 40 CFR 51, Appendix M

Emission testing shall be performed at the kiln/cooler main stack during a period when the kiln precalciner, cooler, raw mill and preheater are operating simultaneously and under normal operating conditions. EPA-reference methods for sampling pollutants shall be as specified in 40 CFR 60, Appendix A.

These emission units shall comply with all applicable requirements of Rule 62-297.310, F.A.C. General Test Requirements and 40 CFR 60.8. Performance Tests. Table 2-1, Compliance Requirements (attached) also lists the EPA methods.

Testing of emissions shall be conducted with the emission unit operating at capacity. The permittee shall provide the DERM with a *protocol* that will outline the different fuel scenarios (% of total heat input) that this unit will be burning. Tarmac shall obtain the test data necessary to determine whether this kiln is capable of accommodating the burning of coal or petroleum coke and all of the other supplemental fuels specified on Specific Condition C.6. Fuel Combustion. The fuel scenarios tested shall represent the actual combustion percentage (% of total heat input) that is going to be maintained while burning supplemental fuels during normal operation. The frequency of testing shall be determined by the DERM.

Annual test are required for NOx and SO_2.

Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the unit may be tested at less than 90% of the maximum operating rate allowed by the permit; in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit. **[Rules 62-204.800, 62-297.310, 62-297.400, 62-297.401, F.A.C., and 40 CFR 60 Appendix A and 40 CFR 60.8, Subpart A].**

C.15 The visible emissions test shall be conducted by a certified observer and should be 180 minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur **[40 CFR 60.11 and Rule 62-297.310 (7), F.A.C.].**

C.16 Compliance with the particulate matter standard contained in Table 1-2 (attached) shall be determined using EPA Method 5. The emission rate (E) of particulate matter shall be computed for each run using the following equation: **[FR volume 64 # 113 63.1349, NESHAP Portland Cement Plant, Subpart LLL)**

$E = (c_s \times Q_{sd})/(P)$

where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

c_s = concentration of particulate matter, kg/dscm.

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis) rate, Mg/hr.

C.17 The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30.0 dscf) for the kiln and at least 60 minutes and 1.15 dscm (40.6 dscf) for the clinker cooler. **[Rules 62-204.800 and 62-297.401, F.A.C. 40 CFR 60.64(b)(1) - (3)].**

C.18 Suitable methods shall be used to determine the kiln feed rate (P), for each run. Material balances over the production system shall be used to confirm the feed rate **[40 CFR 60.64(3)].**

OPERATING PROCEDURES

C.19 Operating procedures shall include good combustion practices and proper training of all operators and supervisors. The good combustion practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. **[Rule 62-4.070(3), F.A.C.].**

RECORDKEEPING AND REPORTING REQUIREMENTS

C.20 The owner or operator shall submit reports of excess emissions based upon data from the continuous opacity monitoring system. Periods of excess emissions that shall be reported are defined as all 6 minute periods during which the average opacity exceeds that allowed in Table 1-2. The content of these reports must comply with the requirements in 40 CFR 60.7(d). Such reports shall be submitted quarterly pursuant to 40 CFR 60.7 (c). **[Rule 62-204.800, F.A.C.; 40 CFR 60.63(d), 60.65(a) and 40 CFR 60.7].**

C.21 In order to document compliance with Specific Condition No. C6(2) **Coal and Petroleum coke,** a fuel usage control system shall be established to assure that the coal and petroleum coke usage rates does not exceed 23 TPH and 20 TPH based on a 24-hour average respectively.

C.22 In order to document compliance with Specific Conditions No. C.6(3) through C.6(6) **Used Oils** , the following requirements shall be adhered to as a minimum:

(1) Recordkeeping when burning used oil shall be in accordance with applicable provisions of 40 CFR Part 279, Subpart B and Subpart G (July 1, 1996 version), Standards For The Management of Used Oil and Chapter 62-710, F.A.C.

(2) The following shall be recorded on the delivery receipt:

- the use of tamper proof seals on the delivery receipt
- the volume of fuel delivery
- a cross reference to the analysis which establishes that the used oil meets EPA used oil fuel specifications
- the results of the screening analysis
- the name of the person performing the test
- the specific test kit used
- the amount of oil sampled
- the amount and name of the solution used to dilute the oil

(3) The following procedures shall be implemented:

- On and off spec used oil that is delivered without a delivery receipt containing all the above information, or which is not properly sealed, or for which the delivery receipt does not contain all the necessary information, is not to be accepted and the DERM is to be notified by phone immediately (with written confirmation to follow), if such a delivery is attempted.
- Verification by signature on the delivery receipt shall be provided by plant personnel that the delivery truck arrived on site with all seals intact. As delivered samples of all used oil fuel received shall be accumulated through each quarter for each supplier.
- The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the DERM within 30 days after a sample is taken and analyzed.
- The dates and quantities of both on and off-spec purchased used oil transferred to the facility storage tank shall be reported quarterly (i.e., Jan-Mar, April-June, July-Sept, and Oct-Dec). The report is due in the month following the ending quarter.
- The unused portion of the used oil sample shall be retained for six months following the submittal of the analyses in case further testing is required.

C.23 All measurements, records, and other data required to be reported by the permittee shall be submitted to the DERM on a quarterly basis with the start of commercial operation in accordance with 40 CFR 60.7. All measurements, records and other data required to be maintained by the permittee shall be retained for at least 5 years following the date on which such measurements, records, or data are recorded. The data shall be available to the DERM or FDEP staff as requested. [**40 CFR 60.7**]

C.24 The owner or operator shall submit reports of the malfunction information required to be recorded by 40 CFR 60.7(b). These reports shall include the frequency, duration, and cause of any incident resulting in de-energization of any device controlling kiln emissions or in the venting of emissions directly to the atmosphere. **[Rule 62-204.800, F.A.C., 40 CFR 60.65 (c)]**

C.25 This facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. Operators shall keep a daily Operation and Maintenance log to include, at a minimum, the following information:

- The data collected from in-stack monitoring instruments
- The records on daily feed rates and clinker production rate
- The amount and type of fuel burned
- Calibration logs for all instruments
- Maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit;
- The following fuel records shall be maintained for a minimum of five (5) years and made available upon request:

    1. Coal
        (a) The coal usage rate in tons per day;
        (b) The average sulfur content and heating value (Btu/lb) of each coal shipment based upon analysis of a sample representative of the shipment (trainload).
    2. Liquid Fuels
        (a) The fuel type (number) and usage rate in gal per day;
        (b) Records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon analysis of a sample representative of the shipment.
    3. Natural Gas
        (a) The fuel usage rate in cubic feet per day;
        (b) The average heating value (Btu/ft^3) provided by the gas supplier.

All measurements, records, and any other data required to be maintained by Tarmac shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These data shall be made available to the FDEP and to the DERM upon request. DERM shall be notified in writing at least 15 days prior to the testing (auditing) of any emission measurement instrument required to be operated by these specific conditions in order to allow witnessing by authorized personnel. **[Rule 62-4.070(3), F.A.C.]**

SUBSECTION D. SPECIFIC CONDITIONS

The following Specific Conditions apply to the following emission units:

EMISSIONS UNIT NO.	SYSTEM	EMISSIONS UNITS DESCRIPTION
ARMS No. 010, 011,012, 13 and 022	Finish Mill #1 - #5	Finish Mill # 1- #5 and associated conveyors, separators and coolers.
ARMS No. 008 & 009	Clinker Handling and Storage	Clinker Silos 1,2,4,5,11,12, 18-28 and Slag Dryer
ARMS No. 014, 015 and 016	Cement Storage, Packhouse & Loadout	Cement Silos 1-12, Bulk Loadout Unit #1,#2 and #3 and Packhouse

EMISSION LIMITATIONS

D.1 The permittee shall not cause or allow to be discharged into the atmosphere visible emissions or particulate emissions that exceed the limits given in Table 1-1. **[Rule 62-210.200., F.A.C. (Definitions - Potential Emissions)]**

D.2 In order to minimize excess emissions during startup/shutdown/malfunction these emission units shall adhere to best operational practices. **[Rule 62-210.700., F.A.C. and 40 CFR 60.7]**

OPERATIONAL LIMITATIONS

D.3 This cement plant and associated equipment is allowed to operate continuously (8760 hours/year) **[Rule 62-210.200., F.A.C. (Definitions - Potential Emissions)].**

TEST METHODS AND COMPLIANCE PROCEDURES

D.4 The maximum permitted allowable particulate emission rate (lb/hr and gr/dscf) from these emissions units are as stated in Table 1-1. The permittee may demonstrate compliance by adhering to an opacity limit of 5% in lieu of particulate stack tests. **[Rule 62-297.620(4), F.A.C.]**

In accordance with Rule 62-297.620(4), minor particulate sources equipped with baghouses with visible emissions that are greater than or equal to 5 percent opacity may require the permittee to perform a stack test in accordance with approved methods to verify compliance with the lb/hr emission limit contained in Table 1-1.

D.5 Compliance with the allowable emission limiting standards listed in Table 1-1 shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A (1996, version) adopted by reference in Rule 62-204.800(7), F.A.C.

Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A).

Testing of emissions must be accomplished within 90 to 100% of the permitted capacity **[Rule 62-297.310(2), F.A.C]**. Failure to submit the input rates and actual operating conditions may invalidate the test **[Rule 62-297.310(2), F.A.C.]**.

These emission units shall comply with all applicable requirements of Rule 62-297.310 General Test Requirements and 40 CFR 60.8, Subpart A, Performance Tests.

D.6 The visible emissions test, EPA Method 9, shall be conducted by a certified observer and should be 60 minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.**[Rule 62-297.310, F.A.C.]**

D.7 Should the DERM have reason to believe the particulate matter standards set forth in Table 1-1 are not being met, the DERM may require that compliance with the particulate emission standards be demonstrated by testing the subject emission unit. **[Rule 62-297.620(4) and 62-297.310, F.A.C.]**

D.8 Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. **[Rule 62-4.070(3), F.A.C.]**.

Executed in Miami-Dade County, Florida.

DEPARTMENT OF ENVIRONMENTAL
RESOURCES MANAGEMENT

Mallika Muthiah 10/21/99

Mallika Muthiah, P.E. Date
Air Facilities Section
Air Quality Management Division

MM/mk

attachment

cc: David Buff, P.E., Golder Associates, Inc.
Isadore Goldman, P.E., Florida Department of Environment, West Palm Beach
Bruce Mitchell, Florida Department of Environmental Protection, Tallahassee

FILING AND ACKNOWLEDGMENT: FILED, on this date, pursuant to § 120.52(7), F.S., with the designated DERM Clerk, receipt of which is hereby acknowledged.

Clerk 10/21/99 Date

Table 1-1. Minor Particulate Sources

FACILITY ID NUMBER: 0250014

Permittee: Tarmac America, Inc.

Permit No.: 0250020-008-AC
New Dry Process Cement Plant

E.U. ID#	Description	Baghouse ID	Emission Basis	Emission Factor	Future PM/PM10 Emissions		Opacity
					Individual Source Total (tons/year)	Emission Unit Total (tons/year)	
003	Coal Handling/Coal Mill System	3 baghouse	0.01 gr/acf; 31,700 acfm	2.72 lb/hr	11.90	11.90	5%
008	Clinker Handling/Stg. Silos 1,2,4,5,11 and 12	K-147, K-247(a)	0.01 gr/acf; 3,000 acfm	0.26 lb/hr	1.13		20%
009	Clinker Handling/Stg. Silos 1,4,11, 17-23, 26-28.	K-347, K-447, K-521, K-522, K-633(b)	0.01 gr/acf; 9,500 acfm	0.81 lb/hr	3.57	4.69	20%
010	Finish Mill No. 1	F-130, F-113	0.01 gr/acf; 23,800 acfm	2.04 lb/hr	8.94		10%
011	Finish Mill No. 2	F-230, F-213	0.01 gr/acf; 23,800 acfm	2.04 lb/hr	8.94		10%
012	Finish Mill No. 3	F-313, F-330, F-332	0.01 gr/acf; 41,500 acfm	3.56 lb/hr	15.58		10%
013	Finish Mill No. 4	F-430,F-432, F-604, F-605	0.01 gr/acf; 67,000 acfm	5.74 lb/hr	25.15		10%
022	Finish Mill No. 5	5 Baghouses	0.01 gr/acf; 64,320 acfm	5.51 lb/hr	24.15	82.75	10%
014	Cement Silos #1-#12	F-511,F-512, F-513, F-514, F-515	0.01 gr/acf; 43,000 acfm	3.69 lb/hr	16.14		5%-20%
015	Cement Distribution Rail/Truck	B-110, B-210, B-372, B-382	0.01 gr/acf; 15,000 acfm	1.29 lb/hr	5.63		5%-10%
016	Cement Distribution-Packhouse	B-612	0.01 gr/acf; 12,000 acfm	1.03 lb/hr	4.51	26.28	5%-10%
				TOTAL	125.6	125.6	

Notes:
(a) Only one baghouse operates at any one time
(b) K-347 and K-447 do not operate at the same time.

Table 1-2. Air Pollutant Standards and Terms.

FACILITY ID NUMBER: 0250020

Permittee:
Tarmac America, Inc.

Permit No.: 0250020-008-AC
New Dry Process Plant

				Allowable Emissions [2]		Equivalent Emissions [3]	
E.U. ID#	Description	Pollutant ID	Fuel(s) [1]	Permit limits	lb/hr [4]	TPY	Basis
#021	Raw Mill/Preheater/Calciner/Kiln System	PM	coal/gas/oil	0.33 lb/ton clinker	52.8	204.6	40 CFR 63, Subpart LLL
#021	Raw Mill/Preheater/Calciner/Kiln System	PM_{10}	coal/gas/oil	85 % of PM	44.9	173.91	AP-42
#021	Raw Mill/Preheater/Calciner/Kiln System	SO_2	coal/gas/oil	2.0 lb/ton clinker (24-hr avg.) 1.3 lb/ton clinker (annual avg.)	320	806	Vendor Design
#021	Raw Mill/Preheater/Calciner/Kiln System	NO_x	coal/gas/oil	4.5 lb/ton clinker(24-hr avg.) 3.15 lb/ton clinker (annual avg.)	720	1953	Vendor Design
#021	Raw Mill/Preheater/Calciner/Kiln System	CO	coal/gas/oil	3.6 lb/ton clinker(24-hr avg.) 2.35 lb/ton clinker (annual avg.)	576	1457	Vendor Design
#021	Raw Mill/Preheater/Calciner/Kiln System	VOC	coal/gas/oil	0.25 lb/ton clinker	40	155	Tarmac
#021	Raw Mill/Preheater/Calciner/Kiln System	H_2SO_{4mist}	coal/gas/oil	0.014 lb/ton clinker	2.24	8.68	Vendor Design
#021	Raw Mill/Preheater/Calciner/Kiln System	THC	coal/gas/oil	50 ppmvd			40 CFR 63, Subpart LLL
#021	Raw Mill/Preheater/Calciner/Kiln System	Dioxin/Furan	coal/gas/oil	0.20 ng TEQ/dscm or 0.40 ng TEQ/dscm			40 CFR 63, Subpart LLL
#021	Raw Mill/Preheater/Calciner/Kiln System	VE	coal/gas/oil	20 % opacity			40 CFR 63, Subpart LLL

Notes
At a maximum design clinker production rate of 160 TPH and a dry feed rate of 277.6 TPH

(1) Fuel combustion as specified in Specific Condition No. C.6 and the protocols established by DERM. See also Specific Condition C.14
(2) Compliance Units. This facility shall demostrate compliance based on these standards.
(3) "Equivalent Emissions are based on annual emissions at 8,760 hrs/yr.
(4) Short Term (24-hour average)

Table 2-1. Compliance Requirements.

FACILITY ID NUMBER:	0250020

Permit No.: 0250020-008-AC

Permittee:
Tarmac America, Inc.
New Dry Process Plant

ARMS E.U. ID#	Description	Pollutant Name or parameter	Fuel(s) [1]	EPA/Reference Method/CMS *	Testing Time Frequency	Min. Compliance Test Duration	CMS * Compliance
# 021	Kiln/Cooler/Raw Mill	PM/PM_{10}	Oil/Coal /Gas/	5 or 201/201A	initial/annual [8]	3 one-hr run	
# 021	Kiln/Cooler/Raw Mill	VE	Oil/Coal/Gas/	9/COMS	initial/annual/COMS	3 one-hr run	No [4]
# 021	Kiln/Cooler/Raw Mill	SO_2	Oil/Coal/Gas/	CEMS	daily average	continuous	Yes [6]
# 021	Kiln/Cooler/Raw Mill	NOx	Oil/Coal/Gas/	CEMS	daily average	continuous	Yes [3]
# 021	Kiln/Cooler/Raw Mill	CO	Oil/Coal/Gas/	10 [5]	initial/annual	3 one-hr run	
# 021	Kiln/Cooler/Raw Mill	VOC	Oil/Coal/Gas/	25 or 25A [2]	initial	3 one-hr run	
# 021	Kiln/Cooler/Raw Mill	H_2SO_4 mist	Oil/Coal/Gas/	8	initial	3 one-hr run	
# 021	Kiln/Cooler/Raw Mill	Hg, Pb, Be	Oil/Coal/Gas/	29	initial	3 one-hr run	
# 021	Fugitive sources	VE		9	Protocol [7]		
# 021	Minor Sources	VE		9	Initial/annual	3 one-hr run	

Notes:

[1] Initial compliance testing shall be conducted under all the scenarios this facility is planning to operate under. Specific condition C.14. Annual testing of emissions shall be conducted during the worst case scenario that this facility would normally operate under. Frequency of testing after initial compliance shall be determined by DERM. Fuels to be burned are specified in Specific Condition C.6.

[2] VOC emission shall be tested initially to comply with the condition of this permit. Thereafter, compliance will be assumed provided the CO allowable emission rate is reached.

[3] NOx - The continuous emission monitor (CEM) data shall be used for the Kiln for compliance requirement. The CEM calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and Appendix F.

[4] Pursuant to 40 CFR 60, Subpart F, the kiln/cooler exhaust system shall be equipped with continuos opacity monitor system (COMS) to record the opacity at the stack to indicate proper maintenance and operation. Monitoring of the opacity of emissions shall be demonstrated by COMS pursuant to 40 CFR 60.63. Notification and recordkeeping shall be accordance with 40 CFR 60.7 and 40 CCFR 60.65.

[5] Continuous process monitors for CO and or O2 to optimize combustion conditions for pollution control shall be part of the process.

[6] SO2- The continuous emission monitor (CEM) data shall be used for the Kiln compliance requirement. The CEM calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and Appendix F.

[7] Protocol as approved by DERM

[8] Tarmac has the option of using Method 5 if they stipulate that all of the PM is PM10.

*CMS [=] compliance demonstration by a continuous monitoring system: CEMS or COMS.

Tarmac
A Titan America Business

VIA ELECTRONIC MAIL

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25 July 2002

Ms. Mallika Muthiah
Air Facilities Section
Miami-Dade County Environmental Resources Management
33 SW 2nd Avenue
Miami, Florida 33130-1540

RE: **Pennsuco Block**
Dade County – AP
Facility ID# 0250020

Dear Ms. Muthiah:

As follow-up to our telephone conversation on Monday regarding the relocation/replacement application for the above referenced facility and your fax copy of the letter from Florida DEP, please allow this letter to provide the additional information requested.

Tarmac is in concurrence with the FDEP determination that the application does not trigger New Source Review. Two (2) noted distinctions from the FDEP calculations must be made. One (1), the number of cement unloadings and the unloading rate are not irrelevant when considering the maximum lb/hour emissions. Cement is not unloaded to the cement storage silos equally for 6,240 hours but rather through an estimated 2,129 unloadings over an estimated 1597 hours. Averaging the annual ton/year emissions over the 6,240 hours would calculate to a much lower lb/hour emission rate. Two (2), a correction is noted regarding the emission calculations that calculated only one weigh hopper/mixer. However, the mixer loading emission factor should not be used as that factor is for a central mix concrete batch plant. The mixers on the block plant are closed systems and do not vent once the cement from the weigh hopper is discharged to the mixer. Those emissions are accounted for on the emission calculations as the weigh hopper/mixer. Additionally, the aggregate and sand transfers are not included in the emission calculations as the moisture content in those materials is high (i.e., saturated) and the PM emissions from the transfers are negligible. I have attached a revised Emission Calculations – Attachment TA-E022-L2 using the newer

AP-42 Emission Factors – Section 11.12, Concrete Batching, October 2001. The revised attachment makes that correction.

"Debottlenecking" does not apply to the requested project application. Debottlenecking can generally be defined as the "Increasing production capacity of existing facilities through the modification of existing equipment to remove throughput restrictions". The block plant relocation/replacement is a stand-alone facility whose operation is not dependent upon some other operation (i.e., the cement production kilns). Therefore, the additional cement for the block plant production does not require any changes to the existing cement plant to meet the new demand; nor does the application request any changes to the existing permitted capacities of the cement plant.

I trust the above provides the additional information requested and I will await your completion of review of the application and subsequent construction permit issuance. A copy of this letter has been sent via regular mail. Should you have any questions or need further information please call me at the number on the cover sheet.

Sincerely,

Scott Quaas
Environmental Manager
Environmental Services—Florida Business

Cc: A.Townsend
D. Buff, Golder Associates
G. DeAngelo, FDEP

PRODUCTION RATE: **5,500 blocks/hour** (96.25 ton/hr ± 51 yd^3/hr)
[maximum] 20 hrs/day, 6 days/wk, 52 wks/yr = **6,240 hrs/yr**

MATERIAL USE: cement = 8.53 tons/hr
[maximum] sand & aggregate = 81.68 tons/hr

UNLOADINGS: cement 53,227 tons/yr / 25 tons/unloading = 2,129 unloadings/yr
[maximum]
assumes ±45 minutes/unloading with an unloading rate of ±30 tons/hour

UNCONTROLLED EMISSIONS: Factors taken from EPA publication "Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Concrete Batching. October 2001

▸ cement silos:	(2@ 30.0 tons/hr) x (0.72 lb/ton mtl)	=	43.20 lb/hr
	(53,227 tons/yr) x (0.72 lb/ton mtl)	=	19.16 ton/yr
▸ weigh hopper/mixer:	(2@ 8.53 tons/hr) x (0.0051 lb/ton mtl)	=	0.09 lb/hr
	(53,227 tons/yr) x (0.0051 lb/ton mtl)	=	0.14 ton/yr

■ **TOTAL UNCONTROLLED EMISSIONS [MAXIMUM]**	=	**43.29 lb/hr**
	=	**19.30 ton/yr**

CONTROLLED EMISSIONS: based on baghouse efficiency of 99% (AP-40, AP-42 & BEP)

▸ cement silos:	(43.20 lb/hr) x (1 - 0.99)	=	0.43 lb/hr
	(19.16 ton/yr) x (1 – 0.99)	=	0.19 ton/yr
▸ weigh hopper/mixer:	(0.09 lb/hr) x (1 - 0.99)	=	<0.01 lb/hr
	(0.14 ton/yr) x (1 – 0.99)	=	<0.01 ton/yr

■ **TOTAL CONTROLLED EMISSIONS [MAXIMUM]**	=	**0.43 lb/hr**
	=	**0.19 ton/yr**

UNCONFINED EMISSIONS:

- ▸ aggregates — unconfined particulate emissions from transfer to storage bins will be negligible; materials are kept wet from sprinklers, covered conveyors, or inherent moisture of materials
- ▸ vehicle traffic — unconfined particulate emissions from vehicular traffic on unpaved roads or yard areas controlled as necessary by application of water or dust suppressants or other reasonable precautions

DESCRIPTION	TITLE: **PENNSUCO BLK**	Tarmac A Titan America Business
EMISSION CALCULATIONS **TA-E022-L2**	FILENAME: Emission Calculations-PennsucoBLK.doc	
	LAST REVISION DATE: **7/25/2002**	