

State of Florida
Department of Environmental Protection
Notice of Permit

In the matter of an
Application for Permit by:

DEP File No. AC 27-274892
PSD-FL-227
Hernando County

Mr. Joseph T. Piermatteo, Sr. Vice President
Florida Crushed Stone Company
10311 Cement Plant Road
Brooksville, Florida 34601

Enclosed is Permit Number AC 27-274892 (PSD-FL-227) to construct a second 83 ton per hour cement plant. The project includes a dry process kiln with a preheater, clinker cooler, crushers, raw mill, finish mill, material and fuel handling equipment, silos, and shipping facilities. The facility is located approximately 3.5 miles northwest of Brooksville, Hernando County, Florida. This permit is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


C. R. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 11-17-95 to the listed persons.

Clerk Stamp
FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.


Clerk

11-17-95
Date

Copies furnished to:

cc: Jewell Harper, EPA
John Bunyak, NPS
Buck Owen, DEP
Bill Thomas, SWD
Doug Beason, DEP
Lawrence Jennings, Hernando County
Don Elias, RTP Env. Assoc.
Lawrence Curtin, H&K
Tom Mountain, FCS



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Florida Crushed Stone Company
10311 Cement Plant Road
Brooksville, FL 34601

Permit Number: AC 27-274892
PSD-FL-227
Expiration Date: 11/30/98
Project: No. 2 Cement Kiln and
Associated Equipment

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-210 through 297. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of a second portland cement kiln a maximum clinker production capacity of 83 tons per hour (TPH) and associated equipment consisting of a clinker cooler, Gepol preheater, raw mill, finish mill, conveyers, transport systems, feed systems, and raw material and product silos, bins and hoppers. The cement kiln will be preheated with fuel oil and/or natural gas, fired with coal as the main fuel, and burn whole tires as supplemental fuel.

The Florida Crushed Stone (FCS) facility is located approximately 3.5 miles northwest of Brooksville, Hernando County, Florida. The UTM coordinates of this facility are Zone 17, 360.0 km East and 3162.5 km North.

The project shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received March 13, 1995.
2. Department's letters dated April 21, memo dated June 16, letter dated August 3, August 10, and October 11, 1995.
3. RTP Environmental Associates letters dated March 21, May 10, May 19, July 11, July 17, August 11, August 22, September 5, September 7, September 12, September 14, and October 24, 1995.
4. EPA's letters dated June 15, and November 2, 1995.
5. Hernando County Planning Department's letter dated April 28, June 5, and August 11, 1995.

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

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 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey 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 Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

GENERAL CONDITIONS:

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

- a. Have access to and copy 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 Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

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

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance,

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

GENERAL CONDITIONS:

provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

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

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT) - **Attached and made a condition of this permit**
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application 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 Department 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 dates analyses were performed;
 - the person responsible for performing the analyses;

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

GENERAL CONDITIONS:

- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. The construction and operation of the No. 2 kiln and associated equipment shall comply with all applicable provisions of Chapter 403, F.S., Chapters 62-4, 62-210 through 297, F.A.C., and 40 CFR 60 (1994 version).

2. Unless otherwise indicated, the construction and operation of the No. 2 cement kiln and associated equipment shall be in accordance with the capacities and specifications stated in the application. The facility shall comply with all applicable requirements of 40 CFR 60, Subpart A, Appendix A and Appendix B (1994 version); Subpart F - Standards of Performance for Portland Cement Plants which are adopted by reference in Rule 62-296.800(2)(a), F.A.C.

3. The No. 2 kiln clinker production rate shall not exceed 83.0 tons per hour (TPH), 1992 tons per day (TPD) and 727,080 tons per year (TPY) based upon 8,760 hours of operation per year.. The permitted maximum preheater feed is 138.0 TPH, which is equivalent to a maximum kiln feed rate of 127.0 TPH. [Rule 62-212.200(58), F.A.C.]

4. Fuels fired in No. 2 kiln shall not exceed a total heat input rate of 303 MMBtu/hr and shall consist only of:

- a. Coal and whole tires, tire derived fuel (shredded tires), and natural gas for normal operation.
- b. Natural gas, all grades (meeting 1.5% sulfur limit) of virgin fuel oil, and/or and blends (meeting 1.5% sulfur limit) of virgin fuel oil and on-spec used oils for startup.

5. The coal usage rate shall not exceed 10.3 TPH or 90,228 TPY based on continuous operation.

6. Whole tires and tire derived fuel may be fed continuously at the kiln inlet at the base of the preheater at a rate not to exceed 45 MMBtu/hr (15% of total kiln fuel input) or 1.33 TPH and 11,039 tons per year based on 8300 hours per year.

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

7. Before initiating tire firing, the gases exiting the kiln ahead of the preheater shall reach a minimum temperature of 1400 degrees F for one hour and the oxygen level in the kiln, as measured at the cement plant induced draft fan, shall reach at least 3 percent (1-hour average). Upon reaching steady state conditions, and within 6 hours, gases exiting the kiln shall be maintained at an outlet temperature of at least 1750 degrees F.

8. The sulfur content of the fuel oil blend shall not exceed 1.5% by weight. 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 266.40 (July 1, 1992 version), which is adopted by reference in Rule 62-730.181, Florida Administrative Code (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

9. On-spec used oil to be blended and 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, 1992 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), Florida Statutes.

10. The on-spec used oil to be blended with the unused fuel oil in the cement kiln fuel storage tank shall be obtained only from the used oil storage tanks located at the FCS Greg Mine and CPL Plant. The used oil sample from Specific Condition No. 12 shall be analyzed for the following constituent/property, associated unit, and using the test methods indicated:

Constituent/Property	Unit	Test Method
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

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

Flash Point	Degree F	EPA SW-846(6010)
Heat of Combustion	Btu/gal	EPA SW-846(1010)
Density	lbs/gal	ASTM D240
Polychlorinated Byphenyls (PCB's)	ppm	

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

11. The maximum on-specification used oil concentration in the final storage tank blend of on-specification used oil and purchased unused oil shall not exceed 15 percent by volume.

12. The maximum allowable emission rates for the No. 2 kiln, clinker cooler, raw mill and preheater shall not exceed the limits listed in Table II.

13. The permittee shall not cause or allow to be discharged into the atmosphere visible emissions which exceed the limits listed in

Table I. In accordance with Rule 62-297.620(4), minor particulate sources equipped with baghouses with visible emissions which are greater than or equal to 5 percent opacity shall require the permittee to perform a stack test in accordance with approved methods to verify compliance with the 0.01 gr/dscf emission limit contained in Table I.

14. Compliance with the allowable emission limiting standards listed in Tables I and II shall be determined within 60 days after achieving the maximum production rate at which this plant will be operated, but not later than 180 days of initial operation, and annually (where specified) thereafter, by using the following reference methods as described in 40 CFR 60, Appendix A (1994 version) and 40 CFR 61 Appendix B 1994 version) adopted by reference in Chapter 62-297, F.A.C.

Method 5	Determination of Particulate Matter Emissions from Stationary Sources (I) and (A).
Method 8	Determination of Sulfuric Acid Mist from Stationary Sources (I).
Method 9	Visual Determination of the Opacity of Emissions from Stationary Sources (I) and (A).
Method 10	Determination of Carbon Monoxide Emissions from Stationary Sources (I) and (A).
Method 22	Visual Determination of Fugitive Emissions from Material Sources (I) and (A).
Method 25	Determination of Volatile Organic Compound Emissions from Stationary Sources (I).

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

Method 29 Determination of Lead, Cadmium, and Mercury from
Stationary Sources (proposed) (I).

Method 104 Determination of Beryllium Emissions from Stationary
Sources (I).

15. Emission testing shall be performed at the No. 2 kiln/cooler stack during a period when the No. 2 kiln, cooler, raw Mill and preheater are operating simultaneously and under normal operating conditions. The measured emission rates will be the combined rates from the kiln and clinker cooler determined at the stack. The Initial (I) compliance test shall be performed within 180 days of start up. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C.

16. EPA-reference methods for sampling pollutants shall consisting of 3 consecutive test runs, each of one hour duration, shall be performed on the common kiln/cooler stack for each pollutant specified in Tables I and II.

17. Stack sampling facilities shall be installed in accordance with Rule 62-297.345, F.A.C.

18. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission limit is being violated.

19. The Department's Southwest District office shall be notified 30 days prior to any compliance test to allow witnessing. Results of the tests shall be submitted to the Department's Southwest Florida District office within 45 days after testing.

20. Testing of emissions shall be conducted with the emission unit operating at capacity (85% coal and 15% tires). 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.

21. Continuous monitoring equipment shall be installed, operated, and used to determine compliance for NOx and SO2. Continuous emission monitors must be installed and certified, before the

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

initial performance test, and operated in compliance with 40 CFR 60, Appendix F, Quality Assurance Procedures (1994 version) or other Department approved QA plan; 40 CFR 60 Appendix B, Performance Specification 1, 2, and 3 (1994 version).

22. Continuous opacity monitors shall be installed, operated, and maintained at the common kiln/cooler stack pursuant to 40 CFR 60.63.

23. Continuous monitors shall be installed for CO or O₂ to insure proper combustion practices and for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO₂.

24. Reasonable precautions to prevent fugitive particulate emissions during construction, such as coating of roads and construction sites used by contractors, and regrassing or watering areas of disturbed soils, will be taken by the permittee. These provisions are applicable to any source, including but not limited to vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. At all times, unconfined particulate matter emissions shall be minimized by dust suppressing techniques, such as covering and/or application of water or chemicals to the affected areas pursuant to Rule 62-296.310(3), F.A.C.- Unconfined Emissions of Particulate Matter.

25. Particulate emissions from coal handling facilities related to the No. 2 kiln shall be minimized by following the procedures listed below: [Rule 62-296.310(3)]

- a. All conveyers and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
- b. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
- c. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc, during dry periods and as necessary to all facilities to maintain an opacity of less than 5 percent, except when adding, moving or removing coal from the coal pile, during which the opacity shall be no more than 20%.

26. The part of the fly ash handling system related to the No. 2 kiln (including transfer equipment, flyash bin, and pneumatic system exhaust) will be totally enclosed and vented through fabric filters.

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

27. In order to document compliance with Specific Condition No. 6:

- a. A log shall be established and maintained for the hours of operation using tires as supplemental fuels. The log shall include the daily tire usage (hours) as supplemental fuel at the facility, a monthly running total of the tire usage (hours), and a cumulative 12 month running total (hours), to ensure that the annual limit is not exceeded. The log shall be maintained on file for at least five (5) years and shall be made available to the Department upon request.
- b. A log that includes the date of all tire deliveries to the facility, and the total quantity (nearest 0.1 tons) of tires received.
- c. A tire usage-control system shall be installed to assure that the tire usage as supplemental fuel at the facility does not exceed the maximum 15% of the total Btu heat input to the No. 2 kiln or 1.33 tons per hour. The control system shall include a verification method and a log that insures and documents that the tires usage and heat input limits are not exceeded.
- d. A log for the utilization rate (tons per hour) of tires. The utilization rate of tires as supplemental fuel shall be determined by a continuous weighing method and shall be recorded.
- e. The logs shall be maintained on file for at least five (5) years and shall be made available to the Department upon request.

28. FCS shall record, as a minimum, the daily dry feed rate into the No. 2 kiln (TPH), and the clinker production rate. The above records shall be retained for a period of five (5) years and made available to the Department upon request.

29. In order to document compliance with Specific Condition No. 5, a coal usage control system shall be established to assure that the coal usage does not exceed a maximum of 10.3 TPH.

30. In order to document compliance with Specific Conditions No. 8 through 11, the following used oil control system shall be used, as a minimum:

- a. Record the transfer of used oil and unused oil to the blend tanks (dates and gallons).
- b. Record the final blend quantities of on-spec used oil and unused oil (gallons)

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

- c. Calculate and record the final percentage of on-spec used oil in the tank blend of on-spec used oil and unused oil, and verify that the percentage does not exceed 15.0 percent, by volume.

These records shall be maintained on file for at least five (5) years and shall be made available to the Department upon request. [Rule 62-4.070(3), F.A.C. and FCS letter on Used Oil Sampling].

31. Recordkeeping requirement when burning on-spec used oil shall be in accordance with 40 CFR 266.43 (b) and (6) (July 1, 1992 version). The results of each sample analysis shall be submitted to the Department Southwest District office and the Hernando County Planning offices within 30-days after a sample is taken. The dates and quantities of both on-spec purchased fuel 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. All records shall be kept for a minimum of five (5) years period for public and regulatory agency inspection.

32. All measurements, records, and other data required to be maintained by the permittee shall be reported to the Southwest District office 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 Department staff as requested. [40 CFR 60.7]

33. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (Rule 62-210.300(1), F.A.C.).

35. Objectionable odors associated with air emissions from this facility shall be prohibited. [Rule 62-296.320]

36. Pursuant to Rule 62-210.370(2), F.A.C., Annual Operating Reports, the permittee is required to submit annual reports to the Southwest District office by March 1 of each calendar year, on the actual operating rates and emissions from this facility. These reports shall include at a minimum the following:

- a. the input process rate
- b. total quantity (by weight) of tire used as supplemental fuel.
- c. total coal, natural gas, and oil usage, and
- d. regulated pollutant emission rates.

PERMITTEE:
Florida Crushed Stone

Permit Number: AC 27-274892
Expiration Date: 11/30/98

37. The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Southwest District office of any delays in completion of the project which would affect the startup date by more than 90 days. [Rule 62-4.090, F.A.C.].

38. An application for an operation permit must be submitted to the DEP's Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit (Rules 62-4.055 and 62-4.220, F.A.C.).

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management

Table I
Allowable Opacity Limits

Description	Control	Emission Unit Equipment	Grain Loading (gr/dscf)	OPACITY
Emission Unit: Raw Material Processed Process Rate				
Material Processing (Fugitive)				10
Handling and Storage (Fugitive)				10
Emission Unit: Raw Mill System Process Rate = 127 TPH Dry Feed				
Iron Ore Bin	Baghouse	2D-61	0.01	5
Fly Ash Bin	Baghouse	2D-64	0.01	5
Filter Dust Bin	Baghouse	2D-72	0.01	5
Raw Meal Transport	Baghouse	2F-03	0.01	5
Limo Silo Storage	Baghouse	2F-21	0.01	5
Raw Mill Storage and Homogenizing Silos	Baghouse	2T-01	0.01	5
Emission Unit: Kiln Operations Process Rate = 303 MMBTU/hr				
Kiln Feed System	Baghouse	2H-05, 2E-66	0.01	5
Kiln Main Stack	Baghouse	2E-40		10
Emission Unit: Finish Mill Process Rate = 83 TPH Clinker				
Gypsum Storage Bin	Baghouse	2L-14	0.01	5
Clinker Transport	Baghouse	2L-03	0.01	5
Belt Conveyor	Baghouse	2M-08	0.01	5
Finish Mill Discharge Vent	Baghouse	2N-02	0.01	5
Finish Mill Sepal Separator	Baghouse	2N-08	0.01	5
Emission Unit: Cement Handling Process Rate: ~ 90 TPH Portland Cement				
Cement Storage Silo A	Baghouse	2Q-01, 2Q-20	0.01	5
Cement Storage Silo B	Baghouse	2Q-01, 2Q-20	0.01	5
Cement Silo Discharge Hopper	Baghouse	2Q-01, 2Q-20	0.01	5
Emission Unit: Coal Handling Process Rate = 10.3 TPH				
Coal Transport Conveyor	Baghouse	2S-03	0.01	5
Coal Storage Bin	Baghouse	2S-01	0.01	5
Coal Handling and Storage (Fugitive)				5/20

Table II
Allowable Emissions
Main Stack

POLLUTANT	BACT EMISSION LIMIT		EMISSION RATE		BASIS
	lb/ton clinker	lb/ton dry feed	lbs/hr	tons/yr	
PM/PM ₁₀ (kiln)	0.310	0.200	25.400	111.250	BACT
PM/PM ₁₀ (cooler)	0.150	0.100	12.700	55.620	BACT-NSPS
SO ₂	0.270	0.176	22.410	98.156	BACT
NO _x *	2.800	1.830	232.400	1017.912	BACT
CO	2.000	1.307	166.000	727.080	BACT
VOC	0.100	0.065	8.300	36.354	FCS/DEP
H ₂ SO ₄	0.014	0.009	1.162	5.090	FCS DATA
Beryllium	9.90E-07	6.47E-07	8.22E-05	3.60E-04	FCS/DEP
Mercury	2.40E-05	1.57E-05	1.99E-03	8.72E-03	FCS DATA
Lead	5.20E-04	3.40E-04	4.32E-02	1.89E-01	FCS DATA

Note: * FCS shall have up to 18 months after startup of commercial operation to achieve this standard.