

Florida Rock Industries, Inc.
Thomas S. Baker Cement Plant - Newberry
Facility ID No.: 0010087
Alachua County

Initial Title V Air Operation Permit
DRAFT Permit No.: 0010087-002-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Northeast District Air Program
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590
Telephone: 904/448-4310
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Compliance Authority:

State of Florida
Department of Environmental Protection
Northeast District - Branch Office
101 NW 75th Street, Suite 3
Gainesville, Florida 32607-1609
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Permittee:
Florida Rock Industries, Inc.

DRAFT Permit No.: 0010087-002-AV
Facility ID No.: 0010087
SIC Nos.: 32, 3241
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Thomas S. Baker Cement Plant- Newberry. This facility is located on County Road 235, 2.5 Miles Northeast of Newberry, Alachua County; UTM Coordinates: Zone 17, 348.4 km East and 3287.0 km North; Latitude: 29° 42' 21" North and Longitude: 82° 35' 00" West.

Statement of Basis: This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-3, TITLE V CONDITIONS version dated 04/30/99
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96
Figure 1 - Summary Report-Gaseous and Opacity Excess
Emission and Monitoring System Performance Report version dated 07/96
40 CFR Part 60 Subpart A - General Provisions
40 CFR Part 63 Subpart A - General Provisions
Table I of AC01-267311/PSD-FL-228- Allowable Opacity Limitations
Table II of AC01-267311/PSD-FL-228- Allowable Emissions
Revised Table II of 0010087-003-AC/PSD-FL-228A- Allowable Emissions

Effective Date: *
Renewal Application Due Date: *
Expiration Date: *

Christopher L. Kirts, P.E.
District Air Program Administrator

CLK:LM

* to be inserted upon issuance

Section I. Facility Information.

Subsection A. Facility Description.

Florida Rock Industries, Inc.- Thomas S. Baker Cement Plant - Newberry is a Portland cement plant. This facility consists of raw material handling and storage, a raw mill system, kiln system, clinker handling, finish grinding operations, cement handling, loading, and bagging operations, and coal handling and grinding operations.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received October 1, 1999, this facility is a major source of hazardous air pollutants, Sulfur Dioxide, Carbon Monoxide, Particulate Matter, PM₁₀, and NO_x.

This facility is subject to 40 CFR 60, Subparts A, F and Y (Standards of Performance for New Stationary Sources –General Provisions and Standards of Performance for Portland Cement Plants) adopted and incorporated by reference in Rule 62-204.800(7)(b)9., F.A.C.; Rule 62-296.407, F.A.C., Portland Cement Plants; and, AC01-267311/PSD-FL-228; and BACT, issued 12/23/96 and 12/20/96, respectively. This facility is subject to 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants -- General Provisions; and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

<u>E.U. ID No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln system
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations
007	Coal Handling and Grinding Operations

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1, Permit History/ID Number Changes

These documents are on file with permitting authority:

Initial Title V Permit Application received October 1, 1999

Additional Information Request dated: November 22, 1999

Additional Information Response received: December 23, 1999

AC Modification, dated July 13, 2000

0010087-003-AC/PSD-FL-228A:

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}
2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. 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., AC01-267311/PSD-FL-228]
3. General Particulate Emission Limiting Standards. 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 of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
4. Prevention of Accidental Releases (Section 112(r) of CAA).
 - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable; and
 - b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), F.A.C.]
6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. Compliance Plan

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln System
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations

These emissions units were constructed under the authority of AC01-267311/PSD-FL-228, issued 12/23/96.

The following conditions clarify the scope of such activities that may continue following issuance of the Title V permit:

1. The permittee shall comply with all of the terms and conditions of AC01-267311/PSD-FL-228, issued 12/23/96, and modified on 06/13/00; and 0010087-003-AC/PSD-FL-228A.
 2. The AC Permit modification authorizes replacement or addition of continuous emission monitoring equipment and conversion of the precalciner to a Low NO_x Multi-Staged Calciner (MSC) to meet the lower nitrogen oxides emission limit as described in Table II of the original permit. All additional construction related to installation of the MSC and short-term compliance testing for NO_x shall be completed by 12/31/01. All compliance testing related to operation of the MSC to determine final long-term NO_x emission limits shall be completed by 03/31/02.
 3. Installation of VOC Continuous Emissions Monitoring is required by Modified Permit 0010087-003-AC/PSD-FL-228A.
 4. In NSPS- 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, the rule states a 10% opacity for dry process and 0% opacity for wet process for certain equipment. The permittee must report to the Department, what equipment is subject to the wet and dry limits within 90 days after the Final Permit is issued.
 5. The permittee shall achieve compliance with the requirements of 40 CFR Part 63, Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) no later than June 10, 2002, unless extended pursuant to 40 CFR Part 64, Subpart A. [40 CFR 63.6(I)(3)].
 6. Comply with the General Provisions, 40 CFR Part 63, Subpart A as specified in 40 CFR Part 63, Subpart LLL, Table 1 for the subject emission units. [40 CFR 63.1342].
 7. The permittee shall apply for a permit revision to this permit (and AC01-237611/PSD-FL-228 if determined to be necessary by the Department) to incorporate the relevant Subpart LLL requirements and ensure compliance with those standards no later than January 31, 2003. [40 CFR 63.7(2), 62-297.310(8)(b), 62-213.430(4), 62-210.300(1)(b)].
- 8. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]
- 9.** The provisions of Rule 62-296.320(4)(c), F.A.C., shall apply to all sources of unconfined

particulate emissions, including but not limited to vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or related activities such as loading, unloading, storing and handling. Florida Rock Industries shall follow the following protocol for the unconfined particulate matter (UPM, Fugitive Emissions):

The material handling activities at the plant covered by this protocol include loading and unloading, storage and conveying of:

- Limestone and overburden
- Iron oxide source (coal ash, iron ore, or other)
- Gypsum
- Coal

Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- All materials at the plant will be stored under roof on compacted clay or concrete.
 - The plant area will be paved to limit the generation of UPM from truck and equipment traffic.
 - A sweeper truck will be maintained and operated at the plant to limit dust buildup on paved surfaces.
 - All materials are to be received and used with excess surface moisture.
 - Water supply lines, hoses and sprinklers will be located near all material stockpiles.
 - All plant equipment operators will be trained in basic environmental compliance, and will perform visual inspections of materials before handling. If the visual inspections indicate a lack of excess the materials can be handled without generating UPM.
 - The permittee shall "immediately collect" any spilled CKD to prevent fugitive emissions.
- [Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received [10/01/99]]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C., Condition 58. of APPENDIX TV-3, TITLE V CONDITIONS.}

10. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

11. The permittee shall submit all compliance-related notifications and reports required of this permit to the Department's Northeast District Branch Office, Air Section:

Department of Environmental Protection
Northeast District Branch Office
101 NW 75 Street, Suite 3
Gainesville, Florida 32607-1609
Telephone: 352/333-2850
Fax: 352/333-2856

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch, Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9164

Section III. Emission Unit(s) and Conditions

Subsection A.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-001	Raw Material Handling and Storage. Emission points EP01 (Raw material unloading). EP02 (Raw material handling and storage) and EP03 (Crusher)

Emissions Unit 001 identifies the raw material handling and storage operations. EU 001 shall be controlled by the application of water sprays.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants adopted and incorporated by reference in Chapter 62-204, F.A.C.; NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Essential Potential to Emit (PTE) Parameters

General

A.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

A.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.2. Visible Emissions. Visible emissions shall not exceed 10 percent opacity for (EP01) Raw Material Processing and (EP02) Raw Material Handling and Storage.
[40 CFR 60.62(c), AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for Condition A.2. is based on the run time of the specified test method.}

A.3. Visible Emissions (Crusher). Visible emissions shall not exceed 15 percent opacity for the primary crusher, EP 03.
[AC01-267311/PSD-FL-228, 40 CFR 60.672(c)]

{Permitting Note: The averaging time for Condition A.3. is based on the run time of the specified test method.}

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.4. The permittee shall test the emissions from the Raw Materials Handling and Storage for visible emissions (V.E.) annually, (See Condition A.2.).
[Rule 62-297.310(7)(a)4., F.A.C.]

A.5. Visible Emissions. (EP01, EP02, EP03), The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.
[40 CFR 60.64(b)(4); AC01-267311/PSD-FL-228]

Notification

A.6. 40 CFR 60, Subpart OOO § 60.676 (a)(4)(g). The owner or operator of any screening operation, bucket elevator, or belt conveyor that processes saturated material and is subject to §60.672(h) and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the 10 percent opacity limit in §60.672(b) and the emission test requirements of §60.11 and this subpart. Likewise a screening operation, bucket elevator, or belt conveyor that process unsaturated material but subsequently processes saturated materials shall submit a report of this change within 30 days following such change. This screening operation, bucket elevator, or belt conveyor is then subject to the no visible emission limit in §60.672(h).

A.7. Common Condition I.1 – I.13.

A.8. Common Condition J.1

Section III. Emission Unit(s) and Conditions

Subsection B.: This section addresses the following emissions unit

<u>E.U. ID</u>	<u>Brief Description</u>
<u>No.</u> -002	Raw Mill system .

Emissions Unit 002 identifies the raw mill system, consisting of: (EP01) Recycle Dust and Raw Meal to Homogenization Silo, (EP02) Recycle dust airlift, (EP03) Recycle dust and raw material to homogenization silo No. 2, and (EP04) Raw meal and recycle dust to preheater all controlled by fabric filters.

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C., and PSD Regulations.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Essential Potential to Emit (PTE) Parameters

General

B.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.

[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

B.1. Capacity. The maximum throughput rate for this emissions unit shall not exceed 212 tons per hour of raw materials.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC01-267311/PSD-FL-228]

B.2. Methods of Operation - (i.e. Fuels). A maximum of 283.8 gallons per hour and 2,486,000 gallons per year of "unused No. 2" fuel oil is allowed to be fired in the Raw Mill Air Heater.

[Rule 62-213.410, F.A.C., AC01-267311/PSD-FL-228]

B.3. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(228), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.4. Visible Emissions. Visible emissions at each emissions point at this emissions unit shall not exceed 5 percent opacity.
[62-212.400, F.A.C., AC01-267311/PSD-FL-228]
{Permitting Note: The averaging time for Condition B.4. is based on the run time of the specified test method.}

B.5. Particulate Matter. Particulate Matter emissions at each emission point at this emissions unit shall not exceed 0.01 gr/dscf.
[BACT and AC01-267311/PSD-FL-228]
{Permitting Note: The averaging time for Condition B.5. is based on the run time of the specified test method.}

B.6. Sulfur Content – Fuel Oil. Sulfur content of the “unused No. 2” fuel oil shall not exceed 0.05% by weight.
[BACT and AC01-267311/PSD-FL-228]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.7. The permittee shall test the emissions from the Raw Mill System for the following pollutants annually:

- a. Visible Emissions (V.E.)
(See Condition B.4.)
- b. Particulate (PM)
(See Condition B.5.)

[Rule 62-297.310(7)(a)4, F.A.C.]

B.8. Visible Emissions. The test method for visible emissions shall be EPA Method 9.
[AC01-267311/PSD-FL-228]

B.9. Particulate Matter. Compliance shall be demonstrated by conducting the visible emissions test required under specific condition B.7. Because of the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with a baghouse control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of the particulate stack test.
[Rule 62-297.620(4), F.A.C.]

B.10. Sulfur Dioxide. Compliance with the SO₂ emissions limit shall be demonstrated by certified ASTM fuel oil analysis in lieu of a stack test.
[Rule 62-212.400, F.A.C., AC01-267311/PSD-FL-228]

B.11. Common Condition H.1 - H.4

B.12. Common Condition I.1 - I.13.

B.13. Common Condition J.1.

B.14. This emissions unit is subject, as applicable and designated per 40 CFR 63.1340, to Subsection K. Common Conditions, Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Section III. Emission Unit(s) and Conditions

Subsection C.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-003	Kiln System

Emissions Unit 003 identifies the Kiln system. A high efficiency electrostatic precipitator controls particulate emissions.

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C., and PSD regulations.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

General

C.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Essential Potential to Emit (PTE) Parameters

C.1. Capacity (Preheater). The preheater dry feed rate shall not exceed 149.9 tons per hour and 1,114,350 tons per year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC01-267311/PSD-FL-228]

C.2. Capacity. The maximum production rate for the kiln clinker shall not exceed 95.8 tons per hour and 2300 tons per day and 712,500 tons per year. The clinker production rate shall be determined as a function of the preheater dry feed rate.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; AC01-267311/PSD-FL-228]

C.3. Methods of Operation - (i.e. Fuels). Fuels fired in the pyroprocessing system (kiln and calciner) shall not exceed a total maximum heat input of 364 MMBtu/hr and shall consist of only coal, whole tires, propane and "unused No. 2" fuel oil which may also be fired in the Raw Mill Air Heater. Propane usage is limited to startup and in lieu of tires in the first stage of the MSC. The burning of RCRA hazardous waste or used oil is prohibited. The fuel usage shall meet the following:

Coal	<ul style="list-style-type: none">The sulfur content shall not exceed 1.25% by weight. The maximum usage rate shall not exceed 14.0 tons per hour. The sulfur content shall be determined by ASTM Method D-2234, D-3173, D-3176, D-3177 or D-4239.
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Whole Tires	<ul style="list-style-type: none"> • The maximum feed rate shall not exceed 109.2 MMBtu/hour (30% of the total kiln fuel input) or 4.2 tons per hour (approximately 400 tires per hour) and 36,792 tons per year. • The tires shall be fed into the kiln system at the transition section between the base of the precalciner and the point where gases exit the kiln. The tire feeder mechanism shall have a double airlock, vertical and horizontal guillotine gates, and a ram. • Prior to initiating tire firing, the gases exiting the kiln ahead of the calciner burner shall be maintained at a minimum of 1,400 degrees F for at least one hour.
No. 2 Fuel Oil (unused)	<ul style="list-style-type: none"> • Shall be fired and the sulfur content shall not exceed 0.05% by weight. The maximum usage rate shall not exceed 125,000 gallons per year for kiln startup.
Propane	<ul style="list-style-type: none"> • Limited to startup and in lieu of tires in the first stage of the MSC.

[Rule 62-213.410, F.A.C., AC01-267311/PSD-FL-228; 0010087-003-AC/PSD-FL-228A]

C.4. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year, as long as the 712,500 TPY clinker limit is not exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.5. Mercury (Hg). Total input of mercury compounds (as Hg) in all materials and fuel kiln system shall not exceed 200 pounds per year.

[AC01-267311/PSD-FL-228].

C.6. Visible Emissions (Kiln). Visible emissions from the kiln shall not exceed 10 percent opacity. [AC01-267311/PSD-FL-228 and BACT]

{Permitting Note: The averaging time for Condition C.6. is based on the run time of the specified test method.}

C.7. Particulate Matter. Particulate Matter emissions shall not exceed 0.20 pounds per ton of dry feed to the kiln and 0.31 pounds per ton of clinker, and 30.00 lb/hr and 110.50 ton/yr.

[AC01-267311/PSD-FL-228, BACT; 40 CFR 60.62(a)(1), 40 CFR 63.1343(c)(1)]

{Permitting Note: The averaging time for Condition C.7. is based on the run time of the specified test method.}

C.8. Particulate Matter (PM₁₀). PM₁₀ emissions shall not exceed 0.17 pounds per ton of dry feed to the kiln and 0.26 pounds per ton of clinker, and 25.50 lb/hr and 93.93 ton/yr.

[AC01-267311/PSD-FL-228, BACT]

{Permitting Note: The averaging time for Condition C.8. is based on the run time of the specified test method.}

C.9. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 0.18 lb/ton of dry feed to the kiln and 0.28 pounds per ton of clinker (24-hr rolling average), and 28.82 lb/hr and 108.55 ton/yr. The permittee shall submit 90 days of certified SO₂ data by July 31, 2001. The Department may revise

the sulfur dioxide emissions limit to less than 0.28 lb/ton clinker based on the compliance test and continuous emission monitoring data within 120 days following receipt of this data. Any such changes will be publicly noticed.

[AC01-267311/PSD-FL-228, BACT]

C.10. NO_x. NO_x emissions shall not exceed 3.8 pounds per ton of clinker (30-day rolling average) during the first two years after startup. After this two-year period, NO_x emissions shall not exceed 2.8 pounds per ton of clinker (30-day rolling average). The permittee shall install any additional control equipment during the two-year time period to insure compliance with the 2.8 pounds per ton of clinker limit by the end of the period. The startup date was 12/31/99.

[AC01-267311/PSD-FL-228, BACT]

C.11. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 2.30 lb/ton of dry feed and 3.60 pounds per ton of clinker (1-hr average), and 346.38 lb/hr and 1288.60 ton/yr.

[AC01-267311/PSD-FL-228, BACT]

C.12. VOC. VOC emissions shall not exceed 0.08 lb/ton of dry feed and 0.12 pounds per ton of clinker (1-hr average), and 11.55 lb/hr and 42.90 ton/year.

[AC01-267311/PSD-FL-228 and BACT]

C.13. Beryllium. Limit to be determined by future stack tests. The startup test date will be 03/31/01.

[0010087-003-AC/PSD-FL-228A]

C.14. Sulfuric Acid Mist (SAM). SAM emissions shall not exceed 0.0016 lb/ton dry feed and 0.0025 lb/ton clinker, and 0.25 lb/hr and 1 ton/year.

[AC01-267311/PSD-FL-228 and BACT; and, Revised Attached Table II of 0010087-003-AC/PSD-FL-228A]

Operations

C.15. Tires. The Permittee shall not place waste tires on the ground. Waste tires shall be received in closed vans and unloaded directly into the tire feeding hopper. In an effort to control mosquitoes at the site, waste tires shall be sprayed with an insecticide prior to receipt at the facility.

[AC01-267311/PSD-FL-228]

C.16. Cement Kiln Dust (CKD). The permittee shall "immediately collect" any spilled CKD to prevent fugitive emissions.

[AC01-267311/PSD-FL-228]

C.17. Cement Kiln Dust (CKD). CKD collected in the kiln electrostatic precipitator (ESP) will be returned to the process. Any CKD not returned to the process shall be handled in accordance with Subtitle C rules under development by EPA. In the interim, the Permittee shall operate under the contingent management practice plan for the storage, sale, or disposal of any CKD not reused.

[AC01-267311/PSD-FL-228]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

C.18. The permittee shall test the emissions from the Kiln System for the following pollutants annually:

Description	Pollutant	Fuel(s) [1]	EPA Reference Method	Testing Time Frequency [2]	Min. Compliance Test duration
Kiln/Cooler/Raw Mill	VE	Coal/Oil/ Propane/WTDF	9/COM	Annual/COM [3]	60 minutes
Kiln/Cooler/Raw Mill	PM/PM ₁₀	Coal/Oil Propane/WTDF	5	Annual	3 one hour run
Kiln/Cooler/Raw Mill	SO ₂ [5]	Coal/Oil Propane/WTDF	CEMS	Daily average	Continuous
Kiln/Cooler/Raw Mill	NO _x [6]	Coal/Oil Propane/WTDF	CEMS	Daily average	Continuous
Kiln/Cooler/Raw Mill	CO	Coal/Oil Propane/WTDF	10	Annual [4]	3 one hour run
Kiln/Cooler/Raw Mill	VOC	Coal/Oil Propane/WTDF	25/25A/ CEM [7]	Annual	
Kiln/Cooler/Raw Mill	Be	Coal/Oil Propane/WTDF	104	Annual	
Kiln/Cooler/Raw Mill	SAM	Coal/Oil Propane/WTDF	8	Annual	

[1] {Rule 62-297.310(7)(a)4., F.A.C., establishes the test frequency. Annual testing of emissions shall be conducted according to common condition I.9. Fuels to be burned are specified in Specific Condition C.3.

[2] {Rule 62-297.310(7)(a)4, F.A.C. allows the permittee to conduct a formal compliance test anytime during the federal fiscal year (October 1- September 30).}

[3] Pursuant to 40 CFR 60, Subpart F, the kiln and cooler exhaust system shall be equipped with continuous monitors to record the opacity at the stack to indicate proper maintenance and operation. Monitoring of the opacity of emissions shall be determined by COMS pursuant to 40 CFR 60.63. Notification and recordkeeping shall be in accordance with 40 CFR 60.7.

[4] Continuous process monitors for CO and/or O₂ to optimize combustion conditions for pollution control shall be part of the process.

[5] 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.

[6] NO_x - The continuous emission monitor (CEM) data shall be used to demonstrate compliance with the kiln emissions limits. The CEM calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B.

[7] VOC CEMs or an alternative method as determined by Consent Order.

[Rule 62-297.310(7)(a)4, F.A.C.]

C.19. Stack Test Conditions. The manual stack test shall be conducted while firing both primary fuels at permitted capacity (70 to 100% coal and 0 to 30% tires) and with all continuous monitoring systems functioning properly, and with all process units operating at their permitted capacity. Permitted capacity is defined in Specific Condition I.8.

If the kiln is tested while firing less than 30% tires, subsequent operation is limited to the percentage of tires burned during the test. Once the kiln is so limited, then operation at greater tire burning rate (with prior notification provided to the Department) is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit. Operation at greater tire burning rates (with prior notification provided to the Department) is also allowed for no more than 45 consecutive days in conjunction with installation and testing of the MSC.

[AC01-267311/PSD-FL-228; Rule 62-297.310(2)(b), F.A.C.; and, 0010087-003-AC/PSD-FL-228A]

C.20. Visible Emissions (Kiln). Compliance shall be demonstrated with use of a continuous opacity monitor.

[AC01-267311/PSD-FL-228, 40 CFR 60.63(b), 40 CFR 63.1349(b)(1)(v)]

C.21. Particulate Matter. The test method for particulate matter emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, and set forth in 40 CFR 60.64 of the NSPS for Portland Cement Plants and 40 CFR 63.1349 NESHAP for Portland Cement Manufacturing Industry.

[AC01-267311/PSD-FL-228, and BACT, 40 CFR 60.64, 40 CFR 63.1349]

C.22. Particulate Matter (PM₁₀). The test method for PM₁₀ emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, and set forth in 40 CFR 60.64 of the NSPS for Portland Cement Plants.

[AC01-267311/PSD-FL-228 and BACT, 40 CFR 60.64]

C.23. Sulfur Dioxide. Compliance shall be determined with an in-stack continuous emissions monitoring system.

[AC01-267311/PSD-FL-228 and BACT]

C.24. NO_x. Compliance shall be determined with an in-stack continuous emissions monitoring system.

[AC01-267311/PSD-FL-228 and BACT]

C.25. Carbon Monoxide. The test method for carbon monoxide emissions shall be EPA Method 10.

[AC01-267311/PSD-FL-228 and BACT]

C.26. VOC. The test method for VOC emissions shall be EPA Method 25 or Method 25A.

[AC01-267311/PSD-FL-228 and BACT]

C.27. Beryllium. The test method for Beryllium emissions shall be EPA Method 104 in accordance with 40 CFR 61, Appendix B.

[AC01-267311/PSD-FL-228 and BACT]

C.28. Sulfuric Acid Mist (SAM). The test method for SAM emissions shall be EPA Method 8 in accordance with 40 CFR 60, Appendix A.

[AC01-267311/PSD-FL-228 and BACT]

Monitoring Requirements

C.29. Flow. The Permittee shall install and operate a continuous flow monitor.
[AC01-267311/PSD-FL-228 and BACT]

C.30. NO_x and SO₂ CEMS. The continuous monitoring system shall be certified, and operated in accordance with the procedures stated at 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 (1995 Version).
[AC01-267311/PSD-FL-228]

C.31. CO and/or O₂ CEMS. Continuous monitors shall be installed for CO and/or O₂ for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO₂ and to set a final SO₂ limit. These monitors (CO and/or O₂) are process monitors and are not subject to 40 CFR 60, Appendix B.
[AC01-267311/PSD-FL-228]

C.32. Continuous Opacity Monitors (COM). COMs shall be installed, operated, and maintained at the kiln/raw mill ESP stack pursuant to 40 CFR 60.63.
[AC01-267311/PSD-FL-228; 40 CFR 60.63(b)]

C.33. VOC- Continuous Opacity Monitors. Permittee shall install, calibrate, maintain and operate a continuous emission monitoring system in the kiln/raw mill stack to measure and record the emissions of VOC from the kiln/raw mill. The CEM system shall be installed, certified, operated and maintained in accordance with Performance Specification 8A of Appendix B of 40 CFR 60. The CEM system shall include an oxygen monitor, which shall be installed, certified, operated and maintained in accordance with Performance Specification 3 of Appendix B of 40 CFR 60. The CEM system's data shall be quality assured using the procedures of Appendix F of 40 CFR 60. The owner or operator shall report no later than the 10th day following each calendar quarter a summary of the daily average VOC emissions reported by the CEMS system for the days of that calendar quarter to the Department's Northeast District Office. These results should be reported as ppm of propane corrected to 7 percent oxygen, pounds per hour of VOC as propane, and pounds of VOC as propane per ton of clinker. This shall be installed by 12/31/01.
[0010087-003-AC/PSD-FL-228A; Rule 62-4.070, F.A.C.]

Reporting

C.34. Quarterly (Be) Testing. Permittee shall conduct quarterly beryllium tests on emissions from the kiln/raw mill stack by March 31, June 30, September 30, and December 31, 2001, using the methods described in Specific Condition I.6. Test reports shall be submitted to the Department's Northeast District Office and the Bureau of Air Regulation in Tallahassee within 30 days after conducting the test.
[0010087-003-AC/PSD-FL-228A; Rule 62-212.400 and 62-4.070, F.A.C.]

C.35. Excess Visible Emissions. The Permittee shall submit reports of excess emissions on a quarterly basis to the Northeast District Office. Excess emissions are defined as all 6-minute periods during which the average opacity exceeds that allowed by 40 CFR 60.62(a)(2), i.e. 20% opacity. The content of the reports shall comply with the requirements of 40 CFR 60.7(c).
[40 CFR 60.63(d); 40 CFR 60.65(a); 40 CFR 60.7(c)]

Recordkeeping

C.36. Tires. The Permittee shall document the number of tires burned during a week and then establish storage and inventory based on a typical weekly requirement. The Permittee shall keep all documentation concerning tire inventory at the site and make the information available for Department review during inspections.

[AC01-267311/PSD-FL-228]

C.37. Coal and Fuel Oil. An operating log shall be established and maintained for the weight of tires fired. The log shall include the daily tire usage, a monthly running total of the tire usage, and a cumulative annual running total 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. Records of the quantity and analysis of coal and fuel oil consumed and invoices for all fuel purchases along with logs for all raw materials and products shall be kept for a minimum of 5 years. Periods of startup, shutdown, and process malfunctions shall be noted on the same logs used for tires.

[AC01-267311/PSD-FL-228]

C.38. Mercury Compounds (as Hg). Monthly sampling and analysis shall be conducted of the raw mill feed, coal and tires to demonstrate compliance with specific condition C.5.

[AC01-267311/PSD-FL-228]

C.39. Common Condition H.1 – H.4

C.40. Common Condition I.1 – I.13.

C.41. Common Condition J.1.

C.42. This emissions unit is subject, as applicable and designated per 40 CFR 63.1340, to Subsection K. Common Conditions, Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Section III. Emission Unit(s) and Conditions

Subsection D.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	Clinker Handling

Emissions Unit 004 identifies the Clinker Handling system. Emission Points are described as follows: (EP01)- Clinker cooler to silos conveyor, (EP02)- Clinker silos, and (EP03)- Clinker Cooler (ESP) These silos are controlled by baghouses and the Clinker Cooler, by an electrostatic precipitator.

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C., and PSD Regulations.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

General

D.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.

[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The maximum production rate for the kiln clinker shall not exceed 95.8 tons per hour and 2300 tons per day and 712,500 tons per year. The clinker production rate shall be determined as a function of the preheater dry feed rate.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., AC01-267311/PSD-FL-228]

D.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year provided the 712,500 ton per year clinker limit is not exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., AC01-267311/PSD-FL-228]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.3. Particulate Matter. Particulate Matter emissions from the Clinker Cooler shall not exceed 0.10 pounds per ton of feed (dry basis) to the kiln and 0.16 pounds per ton of clinker. The PM shall also not exceed 14.99 lbs/hr and 55.70 tons/year.

[AC01-267311/PSD-FL-228 and BACT, 40 CFR 60.62(b)(1), 40 CFR 63.1345(a)(1)]

{Permitting Note: The averaging time for Condition D.3. is based on the run time of the specified test method.}

D.4. Particulate Matter (PM₁₀). PM₁₀ emissions from the cooler shall not exceed 0.13 pounds per ton of clinker.

[AC01-267311/PSD-FL-228 and BACT]

{Permitting Note: The averaging time for Condition D.4. is based on the run time of the specified test method.}

D.5. Particulate Matter. Particulate Matter emissions from the baghouses shall not exceed 0.01 grains per dry standard cubic foot.

[AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for Condition D.5. is based on the run time of the specified test method.}

D.6. Visible Emissions (Clinker Cooler). Visible emissions from the Clinker Cooler shall not exceed 10 percent opacity.

[AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.62(b)(2), 40 CFR 63.1345(a)(2)]

D.7. Visible Emissions (EP01 and EP02). Visible emissions shall not exceed 5 percent opacity from the baghouses.

[AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for Condition D.7. is based on the run time of the specified test method.}

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

D.8. Visible Emissions (Clinker Cooler). Compliance shall be demonstrated with use of a continuous opacity monitor.

[AC01-267311/PSD-FL-228, 40 CFR 60.63(b), 40 CFR 63.1349(b)(1)(v)]

D.9. Visible Emissions (EP01 and EP02). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[AC01-267311/PSD-FL-228]

D.10. Particulate Matter (EP03). The test method for particulate matter emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, and set forth in 40 CFR 60.64 of the NSPS for Portland Cement Plants and 40 CFR 63.1349 NESHAP for Portland Cement Manufacturing Industry.

[AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64, 40 CFR 63.1349]

D.11. Particulate Matter (PM₁₀) (EP03). The test method for PM₁₀ emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, and set forth in 40 CFR 60.64 of the NSPS for Portland Cement Plants.

[AC01-267311/PSD-FL-228 and BACT]

D.12. Particulate Matter (EP01 and EP02). Compliance with the visible emissions standard specified in condition D.7 shall be considered compliance with the particulate matter standard established in condition D.5.
[Rule 62-297.620(4), F.A.C.]

Monitoring Requirements

D.13. Continuous Opacity Monitors (COM). COMs shall be installed, operated, and maintained at the Clinker Cooler ESP stack pursuant to 40 CFR 60.63.
[AC01-267311/PSD-FL-228, 40 CFR 60.63(b)]

Reporting

D.14. Excess Visible Emissions. The Permittee shall submit reports of excess emissions on a quarterly basis to the Northeast District Office. Excess emissions are defined as all 6-minute periods during which the average opacity exceeds that allowed by Specific Condition D.6., i.e., 10% opacity. The content of the reports shall comply with the requirements of 40 CFR 60.7(c).
[40 CFR 60.63(d); 40 CFR 60.65(a); 40 CFR 60.7(c)].

D.15. Common Conditions H.1 – H.4.

D.16. Common Conditions I.1 – I.13.

D.17. Common Condition J.1.

D.18. This emissions unit is subject, as applicable and designated per 40 CFR 63.1340, to Subsection K. Common Conditions, Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Section III. Emission Unit(s) and Conditions

Subsection E.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-005	Finish Grinding Operations

Emissions Unit 005 identifies the Finish Grinding Operations. Fabric filters control particulate matter emissions. Emission Points are identified as follows: (EP01)- Clinker to finish Mill-M-07, (EP02)- Clinker to finish Mill – M-08, (EP03)- Finish mill air separator- N-09, (EP04)- Finish Mill- N-12, (EP05)- Cement handling in finish mill- N-14, (EP06)- Cement storage silos- Q-25, (EP07) - Cement storage silos- Q-26 and (EP08)- Cement storage silos- Q-27

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

General

E.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.

[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Essential Potential to Emit (PTE) Parameters

E.1. Capacity. The maximum process rate for this emissions unit shall not exceed 136 tons per hour of cement output

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.3. Particulate Matter (each EP). Particulate Matter emissions from the baghouses shall not exceed 0.01 grains per dry standard cubic foot.

[AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for Condition E.3. is based on the run time of the specified test method.}

E.4. Visible Emissions (each EP). Visible emissions shall not exceed 5 percent opacity.

[AC01-267311/PSD-FL-228, 40 CFR 60.62(c), 40 CFR 63.1347]

{Permitting Note: The averaging time for Condition E.4. is based on the run time of the specified test method.}

Test Methods and Procedures

{Permitting Note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.5. Visible Emissions. The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[AC01-267311/PSD-FL-228, 40 CFR 60.64(a)(4)]

E.6. Particulate Matter. Compliance with the visible emissions standard specified in condition E.4 shall be considered compliance with the particulate matter standard established in condition E.3.

[Rule 62-297.620(4), F.A.C., AC01-267311/PSD-FL-228 and BACT]

E.7. Common Conditions I.1 - I. 13.

E.8. Common Condition J.1.

E.9. This emissions unit is subject, as applicable and designated per 40 CFR 63.1340, to Subsection K. Common Conditions, Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Section III. Emission Unit(s) and Conditions

Subsection F.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-006	Cement Handling, Loading and Bagging

Emissions Unit 006 identifies the Cement Handling, Loading and Bagging. Emission Points are identified as follows: (EP01)-Cement silo loadout- Q-14, (EP02)- Cement silo loadout- Q-17, (EP03)-Cement silo loadout- Q-21 and (EP04)-Cement bagging operation- R-12.

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted and incorporated by reference in Chapter 62-204, F.A.C.

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

General

F.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.

[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Essential Potential to Emit (PTE) Parameters

F.1. Capacity. The maximum process rate for this emissions unit shall not exceed 500 tons per hour of cement unloading

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

F.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

F.3. Particulate Matter (each EP). Particulate Matter emissions from the baghouses shall not exceed 0.01 grains per dry standard cubic foot.

[AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for Condition F.3. is based on the run time of the specified test method.}

F.4. Visible Emissions (each EP). Visible emissions shall not exceed 5 percent opacity.

[AC01-267311/PSD-FL-228, 40 CFR 60.62(c)]

{Permitting Note: The averaging time for Condition F.4. is based on the run time of the specified test method.}

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

F.5. Visible Emissions. The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR Appendix A.

[AC01-267311/PSD-FL-228, 40 CFR 60.64(a)(4)]

F.6. Particulate Matter. Compliance with the visible emissions standard specified in condition F.4 shall be considered compliance with the particulate matter standard established in condition F.3.

[F.A.C., 62-297.620(4)].

[AC01-267311/PSD-FL-228 and BACT]

F.7. Common Condition I.1 – I.13.

F.8. Common Condition J.1.

F.9. This emissions unit is subject, as applicable and designated per 40 CFR 63.1340, to Subsection K. Common Conditions, Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).

{Permitting Note: **The permittee shall be in compliance with the applicable provisions of 40 CFR 63, Subparts A and LLL prior to June 10, 2002.** This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Section III. Emission Unit(s) and Conditions

Subsection G.: This section addresses the following emissions unit

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-007	Coal Handling and Grinding

Emissions Unit 007 identifies the Coal Handling and Grinding Operation. Emission points are defined as follows: (EP01)-Coal Mill- S-17, (EP02)-Pulverized coal storage bin- S-21 and fugitive emissions from the coal handling and storage operations.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants adopted and incorporated by reference in Chapter 62-204, F.A.C.}

The following conditions apply to the emissions unit(s) listed above:

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

General

G.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Essential Potential to Emit (PTE) Parameters

G.1. Capacity. The maximum throughput rate for this emissions unit shall not exceed 14 tons per hour of pulverized coal.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

G.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.3. Visible Emissions (EP01 and EP02). Visible emissions shall not exceed 5 percent opacity for each identified emission point.
[AC01-267311/PSD-FL-228; and BACT]
{Permitting Note: The averaging time for Condition G.3. is based on the run time of the specified test method.}

G.4. Visible Emissions (Fugitive). An opacity of less than 5 percent shall be maintained at each storage pile, handling equipment, etc., except during times when coal is being added, moved or removed from the coal pile when the opacity shall be no more than 20 percent.

[AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.252(c)]

{Permitting Note: The averaging time for Condition G.4. is based on the run time of the specified test method.}

G.5. Particulate Matter. Particulate Matter emissions from coal handling facilities shall be minimized by following the procedures stated in Section II. Facility-wide Conditions, Condition No. 7 and these listed below:

- All conveyors and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal stacking/reclaiming).
- Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
- 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 that stated in Specific Condition G.4.

[AC01-267311/PSD-FL-228 and BACT]

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

G.6. Visible Emissions (EP01 and EP02). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[AC01-267311/PSD-FL-228, 40 CFR 60.254(b)(2)]

Monitoring

G.7. Temperature. A continuous monitor for temperature shall be installed, operated, and maintained at Emission Point 01 pursuant to 40 CFR 60.253.

[AC01-267311/PSD-FL-228]

G.8. Common Condition I.1 – I.13.

Subsection H. Common Conditions

E.U. ID

<u>No.</u>	<u>Brief Description</u>
002	Raw Mill System
003	Kiln System
004	Clinker Handling

General

H.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

H.1. Storage of solid waste at the facility shall not be in violation of the prohibitions of F.A.C. Rule 62-701.300. In addition, all solid waste material to be used in cement production shall be stored under cover, on compacted clay, to prevent the generation of runoff or leachate.
[AC01-267311/PSD-FL-228]

H.2. In the event that baghouse or ESP catches come in contact with the soil, the waste shall be collected and a hazardous waste determination performed for metals in accordance with 40 CFR 262.11 and Rule 62-730.160, F.A.C. If the hazardous waste determination indicates that the material is hazardous, it shall be disposed of in a permitted hazardous waste disposal facility. If the material is not hazardous, the waste material is a solid waste as defined in Chapter 62-701, F.A.C. and must be disposed of in a permitted, lined landfill. The Permittee shall contact the Solid Waste Section, Northeast District Office, at telephone number (904) 448-4320, prior to disposal of the fugitive baghouse or ESP catches which are to be disposed of as solid waste.
[AC01-267311/PSD-FL-228]

H.3. The Permittee shall store all hazardous waste generated at the site in D.O.T. approved containers and send it for disposal to a permitted hazardous waste facility in compliance with Chapter 62-730, F.A.C.
[AC01-267311/PSD-FL-228]

H.4. The Permittee shall manage used oil and used oil filters generated at the facility in compliance with Chapter 62-710, F.A.C. and 40 CFR 279.12.
[AC01-267311/PSD-FL-228]

Subsection I. Common Conditions

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln System
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations
007	Coal Handling and Grinding Operations

General

I.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

Emission Limitations and Standards

I.1. Emissions from the facility shall comply with the pollutant limits specified in attached Tables I and II. Following completion of the performance tests required herein, the interim SO₂ emission limit may be revised downward based on the test results and continuous emission monitoring data, such that overall control attained for all air pollutants including, SO₂, NO_x, VOC, and CO, is optimized.
[AC01-267311/PSD-FL-228]

Prohibited Fuels

I.2. The burning of RCRA hazardous waste or used oil is prohibited.
[AC01-267311/PSD-FL-228]

Reporting

I.3. Excess Emissions. An excess emission report shall be supplied to the Northeast District office on a quarterly basis 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; AC01-267311/PSD-FL-228]

Malfunctions and Preventable Upset Conditions

I.4. Malfunctions. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions and shall be prohibited.
[Rules 62-210.200(176) and 62-210.700(4), F.A.C.; AC01-267311/PSD-FL-228]

Facility Shutdown

I.5. In the event of a permanent shutdown of the facility, all residual materials will be either properly disposed at a permitted facility or transported to other cement production facilities within six (6) months following shutdown.

[AC01-267311/PSD-FL-228]

Test Methods and Procedures

I.6. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of 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 emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

I.7. 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.**

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation 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 Department shall not require submission of emission 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 and/or solid fuel for a total of no more than 400 hours.

4. 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;

9. The owner or operator shall notify the Department, 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.

10.(b) **Special Compliance Tests.** When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it 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 Department.

[Rule 62-297.310(7), F.A.C.]

I.8. Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity as defined below. 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 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.

(b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

[Rules 62-297.310(2) and 62-297.310(2)(b), F.A.C.]

I.9. 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 port shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP 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:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

[Rule 62-297.310(4)(a)2., F.A.C.]

I.10. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

I.11. Test Reports.

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

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

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

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

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

I.12. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission 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.]

Stack Sampling Facilities

I.13. Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
[AC01-267311/PSD-FL-228]

Subsection J. NSPS Common Conditions

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln System
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations

The following conditions apply to the NSPS emissions unit(s) listed above:

40 CFR 60, Subpart A - General Provisions Requirements

General

J.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.
[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

J.1. These EU(s) are subject to the applicable sections of 40 CFR 60, Subpart A-General Provisions.

Subsection K. NESHAPs Common Conditions

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln System
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations

{Permitting note(s): These emissions units are regulated, as applicable and designated in 40 CFR 63.1340, under Rule 40 CFR 63 Subparts A and LLL (National Emission Standards for Hazardous Air Pollutants -- General Provisions; and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).}

The following conditions apply to the emissions unit(s) listed above:

General

K.0. Tables I and II of AC01-267311/PSD-FL-228 and revised Table II of 0010087-003-AC/PSD-FL-228A are incorporated by reference.

[AC01-267311/PSD-FL-228; and, 0010087-003-AC/PSD-FL-228A]

K.1. The permittee shall comply with 40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) and the requirements of 40 CFR 63 Subpart A (National Emission Standards for Hazardous Air Pollutants -- General Provisions) in accordance with Table 1 of Subpart LLL by **June 10, 2002**.

{Permitting Note: This facility is exempted (except as provided in 40 CFR 63.1356 (a)(1) and (a)(2)) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F) beginning on the applicable 40 CFR 63, Subpart LLL compliance date. [40 CFR 63.1356]}

Table II
Allowable Emissions
Florida Rock Industries

Pollutant	Bact Emission Limit		Emission Rate		Basis
	16/ton clinker	lb/ton dry feed	lb/br	ton/yr	
PM kiln)	0.31	0.20	30.00	110.50	BACT
PM10 (kiln)	0.26	0.17	25.50	93.93	BACT
PM (cooler)	0.16	0.10	14.99	55.70	BACT-NSPS
PM ₁₀ (cooler)	0.13	0.09	12.71	47.34	BACT
S02 (kiln)	0.28	0.18	28.82	108.55	BACT
NO _x (kiln)**	2.80	1.80	268.30	1018.00	BACT
H2SO4 (kiln)	TO BE	DETERMINED BY FUTURE STACK TESTS			BACT
CO (kiln)	3.60	2.30	346.38	1288.60	BACT
VOC (kiln)	0.12	0.08	11.55	42.90	BACT
Beryllium	TO BE	DETERMINED BY FUTURE STACK TESTS			BACT

Notes:

* The kiln emission rate includes fuel oil combustion emissions from the raw mill air heater.

** During the first two years after startup, the kiln shall not exceed a NO_x limit of 3.8 lb/ton clinker and 2.8 lb/ton clinker thereafter. The Department may revise the limit to less than 2.8 lb/ton clinker (30-day rolling average) based on compliance test and continuous emission monitoring data.

The Department may revise the S02 limit to less than 0.28 lb/ton clinker based on compliance test and continuous monitoring data.

STATEMENT OF BASIS

Florida Rock Industries, Inc.
Newberry Cement Plant
Facility ID No.: 0010087
Alachua County

Initial Title V Air Operation Permit
DRAFT Permit No.: 0010087-002-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The currently permitted Florida Rock Industries, Inc. facility consists of the following: raw material handling and storage, a raw mill system, kiln system, clinker handling, finish grinding operations, cement handling, loading, and bagging operations, and coal handling and grinding operations.

Based on the initial Title V permit application received October 1, 1999, this facility is a major source of hazardous air pollutant Sulfur Dioxide, Carbon Monoxide, Particulate Matter, PM₁₀, and NO_x.

Summary of Emissions Unit ID Number(s) and Brief Description(s).

E.U. ID No.	Brief Description
-001	Raw Materials Handling and Storage
-002	Raw Mill System
-003	Kiln System
-004	Clinker Handling
-005	Finish Grinding Operations
-006	Cement Handling, Loading, and Bagging Operations
-007	Coal Handling and Grinding Operations

Emission Unit ID Nos. 001: Emission points EP01 (Raw material unloading), EP02 (Raw material handling and storage) and EP03 (Crusher): Identifies the raw material handling and storage operations. Controlled by the application of water sprays.

Emission Unit ID Nos. 002: identifies the raw mill system, consisting of: (EP01) Recycle Dust and Raw Meal to Homogenization Silo, (EP02) Recycle dust airlift, (EP03) Recycle dust and raw material to homogenization silo No. 2, and (EP04) Raw meal and recycle dust to preheater all controlled by fabric filters.

Emission Unit ID No. 003: Identifies the Kiln system. A high efficiency electrostatic precipitator controls particulate emissions.

Emission Unit ID No. 004: Identifies the Clinker Handling system. Emission Points are described as follows: (EP01)- Clinker cooler to silos conveyor, (EP02)- Clinker silos, and (EP03)- Clinker Cooler (ESP) These silos are controlled by baghouses and the Clinker Cooler, by an electrostatic precipitator.

Emission Unit ID No. 005: Identifies the Finish Grinding Operations. Fabric filters control particulate matter emissions. Emission Points are identified as follows: (EP01)- Clinker to finish Mill-M-07, (EP02)- Clinker to finish Mill – M-08, (EP03)- Finish mill air separator- N-09, (EP04)- Finish Mill- N-12, (EP05)- Cement handling in finish mill- N-14, (EP06)- Cement storage silos- Q-25, (EP07) -Cement storage silos- Q-26 and (EP08)- Cement storage silos- Q-27

Emission Unit ID No. 006: Identifies the Cement Handling, Loading and Bagging. Emission Points are identified as follows: (EP01)-Cement silo loadout- Q-14, (EP02)- Cement silo loadout- Q-17, (EP03)-Cement silo loadout- Q-21 and (EP04)-Cement bagging operation- R-12.

Emission Unit ID No. 007: Identifies the Coal Handling and Grinding Operation. Emission points are defined as follows: (EP01)-Coal Mill- S-17, (EP02)-Pulverized coal storage bin- S-21 and fugitive emissions from the coal handling and storage operations.

This permit contains a Compliance Plan:

E.U. ID

<u>No.</u>	<u>Brief Description</u>
001	Raw Materials Handling and Storage
002	Raw Mill System
003	Kiln System
004	Clinker Handling
005	Finish Grinding Operations
006	Cement Handling, Loading, and Bagging Operations

These emissions units were constructed under the authority of Air Construction Permit, No. AC01-267311/PSD-FL-228, issued 12/23/96.

The following conditions clarify the scope of such activities that may continue following issuance of the Title V permit:

1. The permittee shall comply with all of the terms and conditions of AC01-267311/PSD-FL-228, issued 12/23/96, and modified on 06/13/00; and the Modified AC Permit AC01-267311A/PSD-FL-228A, dated 01/26/01.
3. The AC Permit modification authorizes replacement or addition of continuous emission monitoring equipment and conversion of the precalciner to a Low NO_x Multi-Stage Calciner (MSC) to meet the lower nitrogen oxides emission limit as described in Table II of the original permit. All additional construction related to installation of the MSC and short-term compliance testing for NO_x shall be completed by 12/31/01. All compliance

testing related to operation of the MSC to determine final long-term NO_x emission limits shall be completed by 03/31/02.

4. Installation of VOC Continuous Emissions Monitoring is required by Modified AC Permit AC01-267311A/PSD-FL-228A, dated 01/26/01.
5. In NSPS- 40 CFR 60, Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, the rule states a 10% opacity for dry process and 0% opacity for wet process for certain equipment. The permittee must report to the Department, what equipment is subject to the wet and dry limits within 90 days after the Final Permit is issued.
6. The permittee shall achieve compliance with the requirements of 40 CFR Part 63, Subpart LLL... no later than June 10, 2002, unless extended pursuant to 40 CFR Part 64, Subpart A. [40 CFR 63.6(I)(3)].
7. Comply with the General Provisions, 40 CFR Part 63, Subpart A as specified in 40 CFR Part 63, Subpart LLL, Table 1 for the subject emission units. [40 CFR 63.1342].
8. The permittee shall apply for a permit revision to this permit (and AC01-237611/PSD-FL-228 if determined to be necessary by the Department) to incorporate the relevant Subpart LLL requirements and ensure compliance with those standards no later than January 31, 2003. [40 CFR 63.7(2), 62-297.310(8)(b), 62-213.430(4), 62-210.300(1)(b)].

[0010087.sob]

Table II
Allowable Emissions
Florida Rock Industries

Pollutant	Bact Emission Limit		Emission Rate *		Basis
	lb/ton clinker	lb/ton dry feed	lb/hr	ton/yr	
PM (kiln)	0.31	0.20	30.00	110.50	BACT
PM ₁₀ (kiln)	0.26	0.17	25.50	93.93	BACT
PM (cooler)	0.16	0.10	14.99	55.70	BACT-NSPS
PM ₁₀ (cooler)	0.13	0.09	12.71	47.34	BACT
SO ₂ (kiln) ⁺	0.28	0.18	28.82	108.55	BACT
NO _x (kiln)**	2.80	1.80	268.30	1018.00	BACT
H ₂ SO ₄ (kiln)	0.0025	0.0016	0.25	1	BACT
CO (kiln)	3.60	2.30	346.38	1288.60	BACT
VOC (kiln)	0.12	0.08	11.55	42.90	BACT
Beryllium	TO BE DETERMINED BY FUTURE STACK TESTS				BACT

Notes:

- * The kiln emission rate includes fuel oil combustion emissions from the raw mill air heater.
- ** After startup and until December 30, 2001, the kiln shall not exceed a NO_x limit of 3.8 lb/ton clinker and 2.8 lb/ton clinker thereafter. The Department may revise the limit to less than 2.8 lb/ton clinker (30-day rolling average) based on compliance test and continuous emission monitoring data.
- + The Department may revise the SO₂ limit to 0.28 lb/ton clinker based on compliance test and continuous monitoring.

Table 1-1, Summary of Air Pollutant Standards and Terms

Florida Rock Industries, Inc.
Newberry Cement Plant

Pre-Draft Permit No.: 0010087-002-AV
Facility ID No.: 0010087

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description
EU003 Kiln System

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour **	TPY **	lbs./hour	TPY		
Visible Emissions (Kiln)	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<10% Opacity					BACT 12/20/96 BACT 12/20/96, 40 CFR 60.62(a)(1), 40 CFR 63.1343(c)(1)	III.C.6.
Particulate Matter	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<0.20 lb/T of dry feed to Kiln & 0.31 lb/T of clinker	30.0	110.5				III.C.7.
Particulate Matter (PM10)	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<0.17 lb/T of dry feed to Kiln & 0.26 lb/T of clinker <0.28 lb/T of Clinker (24-hr ave.) May be revised to	25.5	93.93			BACT 12/20/96	III.C.8.
Sulfur Dioxide	Coal, Whole Tires, or No. 2 Fuel Oil	8760	less than, at a later date. <3.8 lb/T of Clinker (30-day rolling ave.) for first 2 yrs after startup. After,	28.82	108.55			BACT 12/20/96	III.C.9.
NOx	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<2.8 lb/T of Clinker	268.3	1,018.0			BACT 12/20/96	III.C.10.
Carbon Monoxide	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<3.6 lb/T of Clinker (1-hr ave.)	346.38	1,288.6			BACT 12/20/96	III.C.11.
VOC	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<0.12 lb/T of Clinker (1-hr ave.)	11.55	42.9			BACT 12/20/96	III.C.12.
Beryllium	Coal, Whole Tires, or No. 2 Fuel Oil	8760	Based on Stack Test Data					BACT 12/20/96	III.C.13.
SAM	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<0.0025 lb/T of Clinker or <0.0016 lb/T of dry feed					BACT 12/20/96	III.C.14.
Hg Compounds	Coal, Whole Tires, or No. 2 Fuel Oil	8760	<200 lb/year in all fuels and Kiln System					BACT 12/20/96	III.C.36.

Notes:

* The "Equivalent Emissions" listed are for informational purposes only.

** The Kiln lb/hr and TPY rates include fuel oil combustion emissions from the raw mill air heater.