Florida Rock Industries, Inc.
Thompson S. Baker Cement Plant - Newberry

Facility ID No.: 0010087
Alachua County

Title V Air Operation Permit Renewal

Permit No. 0010087-041-AV
Renewal of Title V Air Operation Permit No. 0010087-038-AV

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Northeast District
Northeast District Air Program

7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590

Telephone: 904/265-1700
FAX: 904/448-4363

Title V Air Operation Permit Renewal
Permit No. 0010087-041-AV

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Florida Department of Environmental Protection

Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE:
Florida Rock Industries, Inc.
4000 NW County Road
Newberry, Florida 32669

Permit No. 0010087-041-AV
Thompson S. Baker Cement Plant
Facility Id No. 0010087
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit and add 40 CFR 63 Subpart LLL revised emissions limits for existing Portland cement plants at a major source for the above referenced facility. The existing Florida Rock Industries, Inc. - Thompson S. Baker Cement Plant is located in Alachua County at 4000 NW County Road 235. UTM Coordinates Zone 17, 3285.7 km North, 346.4 km East; Latitude 29 /41/37 and Longitude 82/35/11.

The 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, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: DATE, 20xx
Renewal Application Due Date: Exp. DATE -225, 20xx
Expiration Date: Eff. DATE + 5 years, 20xx

(Draft)

_____

Khalid Al-Nahdy, P.E.
District Air Program Administrator

KAA: lm

Subsection A. Facility Description.

Florida Rock Industries, Inc. - Thompson S. Baker Cement Plant - Newberry is a Portland cement plant. This facility consists of raw material handling and storage, raw mill systems, kiln systems 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 (HAPs).

Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
001	Raw Materials Handling and Storage
002	Raw Mill System Line 1
003	Kiln system Line 1
004	Clinker Handling Line 1
005	Finish Grinding Operations Line 1
006	Cement Handling, Loading, and Bagging Operations
007	Coal Handling and Grinding Operation Line 1
008	Clinker to Railcar/ Truck Conveyor
009	Raw Mill System Line 2
010	In line Kiln/Raw Mill- Line 2
011	Clinker Handling- Line 2
012	Finish Grinding Operation- Line 2
013	Cement Load-Out Silos 6 & 7
014	Coal Handling and Grinding operations
017	Three Emergency Engines

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received June 7, 2011, this facility is a major source of hazardous air pollutants (HAP). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines. The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C.

A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014
40 CFR 60, Subpart F	002, 003, 004, 005, 006 and 008, 009, 010, 011, 012, 013
40 CFR 60, Subpart Y	007, 014
40 CFR 60, Subpart OOO	001
40 CFR 63, Subpart A, NESHAPS General Provisions	002, 003, 004, 005, 006 and 008, 009, 010, 011, 012, 013
40 CFR 63, Subpart LLL	002, 003, 004, 005, 006, 008, 009, 010, 011, 012, 013
40 CFR 63, Subpart ZZZZ	017
State Rule Citations (Rule 62-62-204, 62-296.407, Rule 62-212.400, BACT)	001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014

{Permitting Note: The facility is also subject to the federal requirements of the Greenhouse Gas Reporting Program codified at 40 CFR 98. This is not a requirement of the State of Florida.}

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C., Initial Title V permit application received October 1, 1999]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

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, feldspar, gasified slag or other)
- Gypsum
- Coal
- Petcoke
- High-carbon flyash

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 surface moisture, the materials will be wetted with the sprinklers. Such wetting will continue until 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)I2., F.A.C.; and, Proposed by applicant in the initial Title V permit application received [10/01/99]

EU001- Raw Material Handling and Storage Operation **(**Unconfined Particulate Matter). Reasonable precautions may include, but shall not be limited to the following:

1. All materials will be received and used with excess surface moisture.
2. If visual inspections of materials indicate a lack of surface moisture, the materials will be wetted with sprinklers to prevent generation of unconfined particulate matter.

[Rule 62-296.320(4)I3, F.A.C., Unconfined Emissions of Particulate Matter]

EU008- Clinker to Railcar/Truck Conveyor (Unconfined Particulate Matter). Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

1. Clinker will not be transferred unless the dust collector is in operation.
2. Conveyors will remain covered when transferring clinker.
3. Clinker will be transferred to closed trucks or covered railcars. If an open bed is loaded, shrouds will be in place on the spout before transfer begins. If necessary, the open bed will be covered to prevent fugitive emissions.
4. Seals on enclosures, hopper, and spout will be maintained

[Title V Air Application Permit Renewal received July 11, 2006.]

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

FW8. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. 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]

Subsection A.: This section addresses the following emissions unit(s).

EU No.	Brief Description
-001	**Raw Material Handling and Storage.** This emissions unit shall be controlled by the application of water sprays, as needed. EP01: Raw Material Unloading. EP02: Raw Material Handling and Unloading. EP03: Below-Water Rock Crusher. EP04: Above Water-Rock Crusher. EP05: Mobile Crusher. C09 & C10 (Conveyors). EP10: Mobile Powerscreen. The Powerscreen is a track-mounted, mobile scalping screen with a short discharge conveyor. This EP will sort oversized coal or raw material that would otherwise jam the feed hoppers or exceed grinding-mill capacity EP11: Mobile Powerscreen Conveyor EP13: Conveyor segment (C20) on the South end of existing conveyor C10. EP14: A 100-ft long stacker conveyor (C22) on the South end of the new conveyor segment (C11). EP15: A covered surge-bin/ feeder (C21) that will receive rock from the C22 conveyor and place it onto conveyor C20. The interchange of C22 and C20. *EP10 and EP11 will also be occasionally used at EU007- Coal Handling and Grinding Operation, under different EP numbers EP04 & EP05.*

{Permitting note(s): This emissions unit is regulated under NSPS – Subpart OOO, Standards , 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 A– General Provisions, Appendix A and Appendix B. For the purposes of 40 CFR 60 Subpart OOO, the affected sources were constructed prior to April 22, 2008.

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

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

GENERAL

A.0. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised in Permit 0010087-006-AC/PSD-FL-228C, are incorporated by reference.

[AC01-267311/PSD-FL-228; and, Air Construction Permit No.0010087-006-AC/PSD-FL-228C]

A.1. Hours of Operation. The hours of operating are listed below and shall not be exceeded without prior Department approval.

EU/ EP	HOURS	RULE
EP01, EP02, EP03, EP04, EP13, EP14, EP15, C09 & C10	8760 hours per year **NOTE (1)**	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.
EP05	480 hours per year **NOTE (2)**	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.
EP10 & EP11	8760 hours per year **NOTE (3)**	Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.

NOTE (1) These emissions units/ EPs are allowed to operate continuously, i.e., 8,760 hours/year.

[Air Construction Permit No. 0010087-017-AC, Air Construction Permit No. 0010087-019-AC; and Air Construction Permit No. 0010087-029-AC]

NOTE (2) The hours of operation **are limited** and shall be recorded (8 hours per day x 60 days per year).

[Air Construction Permit No. 0010087-017-AC].

NOTE (3) The operating schedule (8,760 HPY) shall not be affected by the occasional use of the (EP10) Mobile Powerscreen and EP11 Mobile Powerscreen Conveyors.

[Air Construction Permit No. 0010087-019-AC]

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.

{Permitting Note: Unless otherwise specified, the averaging time(s) for Specific Condition(s) **A.2.-A.3.** are based on the specified averaging time of the applicable test method.}

A.2. Visible Emissions. Visible emissions shall not exceed 10 percent opacity at each of the following Emissions Points:

- EP01: Raw Material Processing
- EP02: Raw Material Handling and Unloading
- C09 and C10 Conveyors
- EP10: Mobile Powerscreen
- EP11: Mobile Powerscreen Conveyors

A.2. continued:

- EP13: C20- Conveyor
- EP14: C22 -100′ Stacker Conveyor
- EP15: C21 Covered Surge-bin/ Feeder.

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 60.62(c); 40 CFR 60.672(b), Table 3 to Subpart OOO—Fugitive Emission Limits (Row 1), 40 CFR 63.1343 subsumed, Air Construction Permit No. 0010087-017-AC , Air Construction Permit No. 0010087-019-AC, and Air Construction Permit No. 0010087-031-AC].

A.3. <u>Visible Emissions (Crusher).</u> Visible emissions shall not exceed 15 percent opacity at each of the following Emissions Points:

- Primary Crusher
- Below-water Rock Crusher (EP03)
- Mobile Crusher (EP05)
- Above water-Rock Crusher (EP04)

[Permit No. AC01-267311/PSD-FL-228, 40 CFR 60.672(b), Table 3 to Subpart OOO—Fugitive Emission Limits (Row 1), and Air Construction Permit No. 0010087-017-AC].

Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

[40 CFR 60.672(d)]

A.4. <u>Permitted Capacity</u>: The maximum operating rates are listed below and shall not be exceeded without prior Department approval.

MATERIAL	EMISSION UNIT/ POINT	RATE
Raw Materials	EP01, EP02, EP03, EP04, EP10 & EP11 EP13, EP14 & EP15	1330 TPH **NOTE (3)**
		510 tons per hour/ 4,467,600 TPY Annual average in any consecutive 12-month period **NOTE (1)**
Conveyor Systems	C09 & C10	1330 TPH
Mobile Crusher & Conveyors	EP05	72,000 TPY **NOTE (2)**

A.4. continued:

NOTE (1) Annual rate based on the average processing rate of 510 TPH x 8,760 hrs per year. Requested maximum capacity by Applicant Air Construction Permit No. 0010087-017-AC, Air Construction Permit No. 0010087-029-AC., Air Construction Permit No. 0010087-031-AC., and Rule 62-210.200, F.A.C., Definitions – potential to emit (PTE)]

NOTE (2) Annual rate based on 480 hours per year x 150 TPH processing rate. [Air Construction Permit No. 0010087-017-AC.]

NOTE (3) Emission Unit 001 capacity shall not be affected by the occasional use of the (EP10) Mobile Powerscreen and EP11 Mobile Powerscreen Conveyors.

[Air Construction Permit No. 0010087-019-AC]

[Note: The applicant has estimated that the potential to emit from crushing, transfer and unloading operations is: PM 3.0, and PM_{10} 1.3 tons per year.]

{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.}

TEST METHODS AND PROCEDURES

A.5.a. <u>Visible Emissions (EP01 and EP02)</u>. The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A. A test shall be conducted at each emissions point on an annual basis, once each federal fiscal year.

[40 CFR 60.64(b)(4); AC01-267311/PSD-FL-228; Rule 62-297.310(7)(a)4., F.A.C.]

A.5.b. <u>Visible Emissions Fugitive Emissions (EP03, EP04, EP05, EP13, EP14, EP15, C09, C10)</u>. The test method for visible emissions shall be EPA Method 9 of Appendix A–4 of 40 CFR 60 and the procedures in §60.11, with the following additions. A test shall be conducted at each emissions point on an annual basis, once each federal fiscal year.

(a)(1) In determining compliance with the particulate matter standards in §60.672(b) or §60.672(e)(1), the owner or operator shall use Method 9 of Appendix A–4 of 40 CFR 60 and the procedures in §60.11, with the following additions:

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (*e.g.*, road dust). The required observer position relative to the sun (Method 9 of 40 CFR 60 Appendix A–4, Section 2.1) must be followed.

A.5.b. continued:

(iii) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(2) When determining compliance with the fugitive emissions standard for any affected facility described under §60.672(b) or §60.672(e)(1) of this subpart, the duration of the Method 9 (40 CFR part 60, Appendix A–4) observations must be 30 minutes (five 6-minute averages). Compliance with the applicable fugitive emission limits in Table 3 of this subpart must be based on the average of the five 6-minute averages.

(b) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (b) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(2) A single visible emission observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions are met:

(i) No more than three emission points may be read concurrently.

(ii) All three emission points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emission points equals or exceeds the applicable standard, then the observer must stop taking readings for the other two points and continue reading just that single point.

(c) For performance tests involving only Method 9 (40 CFR part 60 Appendix A–4) testing, the owner or operator may reduce the 30-day advance notification of performance test in §60.7(a)(6) and 60.8(d) to a 7-day advance notification.

[40 CFR 60.675(a); (c)(1), (c)(3); (e)(1), (e)(2); and (g); Air Construction Permit No. 0010087-017-AC., Air Construction Permit No. 0010087-019-AC; Rule 62-297.310(7)(a)4.a., F.A.C.; 62-4.070(3) and Air Construction Permit No. 0010087-031-AC]

A.5.c. Visible Emissions Fugitive Emissions (EP10 and EP11). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A. The V.E. tests for EP10 and EP11 must be conducted annually at EU001 or EU007.

[40 CFR 60.64(b)(4); AC01-267311/PSD-FL-228; Rule 62-297.310(7)(a)4., F.A.C.]

A.6. Pursuant to 40 CFR 60.676 Reporting and Recordkeeping:

(a) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in §60.672 of this subpart, including reports of opacity observations made using Method 9 (40 CFR part 60, Appendix A–4) to demonstrate compliance with §60.672(b).

(b) The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in §60.672(b) and the emission test requirements of §60.11.

[Air Construction Permit No. 0010087-031-AC; 40 CFR 60.676(f),(g)]

A.7. Test Reports. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

[Air Construction Permit No. 0010087-017-AC, Air Construction Permit No. 0010087-019-AC.]

A.8. Recordkeeping (EP03, EP04, EP05, C09, C10, EP10 and EP11). The owner or operator shall make and maintain records showing the monthly processing rate of the crusher. Records of the processing rate for each month shall be made no later than 10 days following the end of the month.

[Rule 62-4.070(3), F.A.C., Air Construction Permit No. 0010087-031-AC]

A.9. Common Condition J.0 – J.13.

Subsection B.: This section addresses the following emissions unit

EU No.	Brief Description
-002	**Raw Mill System Line 1.** This emissions unit consists of: EP01: Raw Meal and Kiln ESP Dust to Homogenization Silo (E-28) EP03: Raw Meal and Kiln ESP Dust into homogenization silo (G-07) EP04: Raw Meal and Kiln ESP Dust to preheater all controlled by fabric filters (H-08).

The Raw Mill-Line 1 is controlled by EU003. EP01, EP03 and EP04 have individual fabric filters which are addressed in this Section.

{Permitting note(s): This emissions unit is regulated under 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), NSPS- 40 CFR 60 Subpart F - Standards of Performance for Portland Cement Plants, Subpart A – General Provisions, Appendix A and Appendix B, 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

B.0. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised in Permit 0010087-006-AC/PSD-FL-228C, are incorporated by reference.

[Permit No. AC01-267311/PSD-FL-228; and, 0010087-006-AC/PSD-FL-228C]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

B.1. Capacity. The maximum throughput rate for this emissions unit shall not exceed 255 tons per hour of Kiln ESP dust plus raw meal (peak).

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, Permit 0010087-006-AC/PSD-FL-228C Table I]

{Permitting note: The maximum rates have been placed in each permit section to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

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. Natural Gas firing shall not exceed 40 MMBtu/ hr in the Raw Mill Air Heater.

[Rule 62-213.410, F.A.C., AC01-267311/PSD-FL-228 and Air Construction Permit No. 0010087-015-AC]

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(239), 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 (Each EP). Visible emissions at each emissions point at this emissions unit shall not exceed 5 percent opacity.

[Rule 62-212.400, F.A.C., Permit No. AC01-267311/PSD-FL-228; 40 CFR 60.62(c) subsumed; 40 CFR 60.62(d); 40 CFR 63.1345]

{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 Permit No. 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 Permit No. 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. Visible Emissions (Each EP). The test method for visible emissions shall be EPA Method 9 of 40 CFR 60 appendix A–4. The Permittee shall conduct a visible emissions test at each emissions point on an annual basis, once each federal fiscal year.

In accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard or 1-hour if > 100 tpy.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

(2) There are no more than three readings of 10 percent for the first 1-hour period.

[Permit No. AC01-267311/PSD-FL-228, Rule 62-297.310(7)(a)4., F.A.C.; 40 CFR 60.64(b)(3); 40 CFR 63.1349(b)(2)]

B.8. Particulate Matter. Compliance shall be demonstrated by conducting the visible emissions test required under **specific condition B.7.** The Permittee shall demonstrate compliance at each emissions point on an annual basis, once each federal fiscal year. 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 Fabric Filter 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.; Rule 62-297.310(7)(a)4., F.A.C.]

B.9. Sulfur Dioxide (unused No. 2 fuel oil). Compliance with the SO_2 emissions limit shall be demonstrated by certified ASTM fuel oil analysis or certified by fuel supplier in lieu of a stack test.

[Rule 62-212.400, F.A.C., Permit Nos. AC01-267311/PSD-FL-228 and 0010087-015-AC]

B.10. a. Opacity Monitoring Requirements- EPs 01, 03, 04. Now and until 9/8/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i)The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

B.10.a. continued:

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

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

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

(v)The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi)If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii)If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

B.10. b. <u>Opacity Monitoring Requirements- EPs 01, 03, 04</u>. On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345 must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

B.10.b. continued:

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not Applicable)

B.10.b. continued:

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[40 CFR 63.1350(f)(1), (f)(3); 40 CFR 60.64(b)(4)]

B.11. Common Condition I.0 – I.4

B.12. Common Condition J.0 – J.13.

B.13. Common Condition K.0.- K.4.

Subsection C.: This section addresses the following emissions unit

EU No.	Brief Description
-003	**Kiln System Line 1.** The kiln system (or pyroprocessing system) includes the 156.5-foot kiln, a four-stage preheater tower, a 25,300 cubic foot multi-stage combustion (MSC) calciner, a tire feed system, two coal burners and ancillary equipment. A high efficiency electrostatic precipitator controls particulate emissions. Selective Non-Catalytic Reduction System (SNCR) is a nitrogen oxides control technology. This (SNCR) will provide an alternate/backup/additional control technology at the facility to achieve compliance with the best available control technology (BACT). This can be used in conjunction with or in lieu of the strategy of staged combustion in the calciner and tire introduction at the kiln inlet. The process utilizes injection of ammonia solutions near the lowest preheater cyclone. The equipment consists of a storage tank, piping, pumps, compressed air delivery and injectors.

{Permitting note(s): This emissions unit is regulated under NESHAPS- 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). 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants, Subpart A – General Provisions, Appendix A and Appendix B, and PSD regulations.
Pursuant to 40 CFR 63.1356, if an affected facility subject to 40 CFR 63 Subpart LLL has a different emission limit or requirement for the same pollutant under another regulation in title 40 of the CFR, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.}

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. Table I - Allowable Opacity Limitation and Table II-Allowable Emissions as revised in Permit 0010087-006-AC (PSD-FL-228C) are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and, 0010087-006-AC (PSD-FL-228C)]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

C.1.a. Capacity (Preheater). The preheater dry feed rate is the mass of material (on a dry basis) entering the preheater/kiln. The preheater dry feed rate is limited to 183.4 TPH on a 24-hr rolling average, 191.4 TPH (peak hourly rate), and 1,331,000 TPY.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0010087-006-AC PSD-FL-228C]

{Permitting note: The maximum rates have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

C.1.b. Capacity (Kiln). The Kiln clinker production rate shall not exceed 110.2 tons per hour (TPH) on a 24-hr rolling average, 115.0 TPH (peak hourly rate), and 2650 tons per day (TPD). On an annual basis, the clinker production rate shall not exceed 800,000 tons per year (TPY). The clinker production rate will be determined as a function of the preheater dry feed rate.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0010087-006-AC (PSD-FL-228C)]

C.2. a. Ammonia. Upon malfunction or unavailability of the SNCR system, the operator shall, as soon as practicable, effect a reducing atmosphere in the calciner or inject tires as needed to maintain NO_X control.
[Rule 62-210.650, F.A.C.; Air Construction Permit No. 0010087-021-AC]

C.2.b. Ammonia. The concentration of stored ammonia solutions shall be less than 20 percent (%) by weight.

[Air Construction Permit No. 0010087-021-AC]

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

C.2. c. Ammonia Injection. The ammonia injection rate shall not exceed 150 pounds per hour (1-hour block as 100% ammonia) in order to minimize ammonia emissions (slip). To demonstrate compliance, the owner or operator shall continuously monitor and record the ammonia injection rate. The injection rate of ammonia solution measured in terms of volumetric flow rate shall be converted to pounds per hour as 100% ammonia.

{Note: the maximum ammonia injection rate is equivalent to an NH_3/NO_X molar ratio of 1.0 presuming baseline uncontrolled NO_X emissions of 4 lb/ton of clinker.}

[Air Construction Permit No. 0010087-021-AC]

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 only of coal, (usage rate shall not exceed 14.0 TPH), whole tires, propane, petroleum coke, and fly ash, and natural gas 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. All fuel usage shall be in compliance with the following limits and conditions: [Rule 62-210.200, F.A.C. (Definition. Potential to Emit); Rule 62-210.200(PTE), F.A.C.]

Coal	• The sulfur content shall not exceed 1.75% by weight.[1] 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.
Whole Tires	• 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 consist of a rotary feeder, which seals the tire entry point from the atmosphere. • Prior to initiating tire firing, the gases exiting the kiln ahead of the calciner burner shall be maintained at a minimum of 1,400 °F for at least one hour. The facility shall maintain records of the exit temperature and duration time of the exit gases to verify compliance with this requirement.
No. 2 Fuel Oil (unused)	• Shall be fired and the sulfur content shall not exceed 0.05% by weight (certified by fuel supplier). The maximum usage rate shall not exceed 125,000 gallons per year for kiln startup.
Propane	• Limited to startup and in lieu of tires in the first stage of the MSC.
Fly Ash	• The permitted fly ash feed rate shall exceed neither 19 MMBtu/hr nor 5% of total kiln heat input.
Pet coke	• The permitted petroleum coke feed rate shall exceed neither 91 MMBtu/hr nor 25% percent of total kiln heat input.
Natural Gas	Natural gas fired shall not exceed 364 MMBtu/hr in the kiln.

[1] This permit authorizes the use of up to 1.75 percent sulfur coal. This limit replaces that of all previous air construction and Title V permits. Unless otherwise specified, the emissions unit remains subject to all other applicable conditions from previous air construction and Title V permits. [Rule 62-4.070(3), F.A.C.]

[Rule 62-213.410, F.A.C., Permit Nos. AC01-267311/PSD-FL-228; 0010087-003-AC/PSD-FL-228A and 0010087-015-AC]

C.4. Hours of Operation. Continuous operation is allowed (8,760 hours per year), as long as the 800,000 TPY clinker limit is not exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Permit No. 0010087-006-AC (PSD-FL-228C)]

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.a. Mercury (Hg) 2006 NESHAP. Total input of mercury compounds (as Hg) in all materials and fuel kiln system shall not exceed 200 pounds per year **until 09/08/2013**.

[Permit No. AC01-267311/PSD-FL-228]

C.5.b. Mercury (Hg) 2010 NESHAP. On and after 09/09/2013, Mercury Emissions (Hg) shall not exceed 10 ug/dscm during startup and shutdown and 55 lb/MM tons clinker during normal operation.

[40 CFR 63.1343(b)(1)]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for (Hg) emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.5.a. no longer applies.

C.6. a. Visible Emissions (Kiln) 2006 NESHAP. Until 9/8/2013, Visible emissions from the kiln shall not exceed 10 percent opacity.

[Permit No. AC01-267311/PSD-FL-228; BACT; 40 CFR 63.1343(b)(2) subsumed].

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

C.6.b. Visible Emissions (Kiln) 2010 NESHAP. After 9/9/2013, the VE limitation on the kiln will no longer be applicable because of the PM CEMS.

C.7.a. Particulate Matter 2006 NESHAP. Until 9/8/2013, Particulate Matter emissions shall not exceed 0.14 pounds per ton of dry feed to the preheater and 0.23 pounds per ton of clinker, and 25.9 lb/hr and 94 ton/yr.

[Permit No. 0010087-006-AC (PSD-FL-228C); BACT, 40 CFR 63.1343(b)(1) subsumed, 40 CFR 60.62(a)(1)(i) subsumed, 40 CFR 60.62(d)]

{Permitting Note: The averaging time for **Condition C.7.** a. is based on the run time of the specified test method **until 9/8/2013**. On and after **9/9/2013**, CEMS is required for compliance and the average time is 30-day rolling average (40 CFR 63.1343(a))}

C.7. b. Particulate Matter for Kiln 1 (2010 NESHAP). On and after 9/9/2013, Particulate Matter emissions shall not exceed 0.04 pounds per ton of clinker (normal operation) and 0.004 gr/dscf (startup and shutdown).

[40 CFR 63.1343(b)(1) Table 1, 40 CFR 63.1343(b)(1) subsumed, 40 CFR 60.62(a)(1)(i) subsumed, 40 CFR 60.62(d)]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.7.a. no longer applies.

{Permitting Note: The averaging time for **Condition C.7.b.** is based on the run time of the specified test method until 09/08/2013. On and after 09/09/2013, CEMS is required for compliance and average time is 30-day rolling average (40 CFR 63.1343(a).}

C.7.c. Particulate Matter (PM_{10}) 2006 NESHAP. Until 9/8/2013, PM_{10} emissions shall not exceed 0.12 pounds per ton of dry feed to the preheater and 0.20 pounds per ton of clinker, and 22.1 lb/hr and 80 ton/yr. **After 9/9/2013**, the PM standard (0.04 lb/ton clinker) is more stringent than the current PM10 standard. Therefore, after 09/09/2013 the PM10 standard is no longer applicable

[Permit No. 0010087-006-AC (PSD-FL-228C)]

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

C.8. Kiln 1 New Emissions Limits for HCL and THC (2010 NESHAP):

Pollutant	Emissions Limit	Rule	Compliance Date
Hydrogen Chloride HCL	3[3] ppmvd at 7% O2 during normal operation. No O2 correction during startup and shutdown	40 CFR 63.1343(b)(1)	The compliance date for existing sources for HCL and THC emissions will be September 9, 2013.
Total Hydrocarbon THC	24 [1,2] ppmvd	40 CFR 63.1343(b)(1)	

[1] Measured as propane and corrected to 7% O2 during normal operation. No O2 correction during startup and shutdown.
[2] Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 9 ppmvd for total organic HAP. If the source demonstrates compliance with the total organic HAP under the requirements of §63.1349 then the source's THC limit will be adjusted to equal the average THC emissions measured during the organic HAP compliance test.
[3] If the kiln does not have a HCl CEM, the emissions limit is zero.

[40 CFR 63.1343(b)(1)Table 1 (Rows 1-4)]

C.9. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 0.10 lb/ton of dry feed to the preheater and 0.16 pounds per ton of clinker (24-hr rolling average), and 17.7 lb/hr and 64 ton/yr.

[Permit No. 0010087-006-AC (PSD-FL-228C)]

C.10. NOx. NOx emissions shall not exceed 1.50 lb/ton of dry feed to the preheater and 2.45 pounds per ton of clinker and 271 lb/hr (30-day rolling average) and 980 ton/yr.

[Permit No. 0010087-006-AC (PSD-FL-228C)]

C.11. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 1.55 lb/ton of dry feed to the preheater and 2.50 pounds per ton of clinker and 276 lb/hr (1-hr average), and 1000 ton/yr.

[Permit No. 0010087-006-AC (PSD-FL-228C)]

C.12. VOC (2006 NESHAP). Until 9/8/2013, VOC emissions shall not exceed 0.075 lb/ton of dry feed to the preheater and 0.11 pounds per ton of clinker and 11.8 lb/hr (1-hr average), and 43 ton/year. **Beginning 09/09/ 2013**, in accordance with 40 CFR 63, Subpart LLL, this EU will be subject to the THC limit in **Specific Condition No. C.8.**

[Permit No. 0010087-006-AC (PSD-FL-228C)]

C.13. Sulfuric Acid Mist (SAM). SAM emissions shall not exceed 0.0016 lb/ton dry feed to the preheater and 0.0025 lb/ton clinker, and 0.25 lb/hr and 1.00 ton/year.

[Permit No. 0010087-006-AC (PSD-FL-228C)]

C.14. DIOX (D/F). Emissions shall not exceed 0.20 ng per dscm (8.7×10^{-11} gr per dscf)(TEQ) corrected to 7 percent oxygen; or 0.40 ng per dscm (1.7×10^{-10} gr/dscf)(TEQ) corrected to 7 percent oxygen, when the average of the performance test run average temperatures at the inlet of the particulate matter control device is 204° C (400° F) or less.

[Rule 40CFR 63.1343(b)(1)]

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/Raw Mill System for the following pollutants as described below:

Description	Pollutant	Fuel(s) [1]	EPA Reference Method	Testing Time Frequency or Average Time for CEMS [2]	Min. Compliance Test Duration
Kiln/ Raw Mill	VE	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	9/COM	Annual/COM [3]	30 minutes
			After 09/09/2013 COM, However, No limit because of PM CEMS	After 09/09/2013 COM, However, No limit because of PM CEMS	After 09/09/2013 - COM, However, No limit because of PM CEMS
Kiln/ Raw Mill	PM/PM_{10}	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	5	Annual	3 one hour runs
			CEMS[9]	After 09/09/2013 - 30-day rolling during normal operations / 7-day rolling average during start up/shutdown	Continuous
Kiln/ Raw Mill	SO_2 [5]	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	CEMS	Daily average	Continuous/Daily average with CEMS

C.18.continued:

Description	Pollutant	Fuel(s) [1]	EPA Reference Method	Testing Time Frequency or Average Time for CEMS [2]	Min. Compliance Test Duration
Kiln/ Raw Mill	NO_x [6]	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	CEMS	30-day average with CEMS	Continuous
Kiln/ Raw Mill	CO	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	10	Quarterly [4, 8]	3 one hour runs
Kiln/ Raw Mill	VOC Replaced by THC limit on and after 9/9/2013.	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	25/25A/ CEM [7]	Annual	3 one hour runs
Kiln/ Raw Mill	SAM	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	8	Annual	3 one hour runs
Kiln/ Raw Mill	D/F	Coal/Oil/ Fly Ash Propane/WTDF/ Pet Coke/ Natural Gas	23	Every 30 months	3 three hour runs
Kiln/ Raw Mill	HCL	"	CEMS[10]	---	Continuous
				After 09/09/2013 - 30-day rolling during normal operations / 7-day rolling average during start up/shutdown	

C.18.continued:

Description	Pollutant	Fuel(s) [1]	EPA Reference Method	Testing Time Frequency or Average Time for CEMS [2]	Min. Compliance Test Duration
Kiln/ Raw Mill	THC	"	25 / 25A / CEM until 09/08/2013	Annual until 9/9/2013	Continuous
			CEMS on and after 09/09/2013 [11]	After 09/09/2013 - 30-day rolling during normal operations / 7-day rolling average during start up/shutdown	
Kiln/ Raw Mill	Hg	"	CEMS[12]	Material balance only until 09/08/2013. On and after 09/09/2013, then CEMS. - 30-day rolling during normal operations / 7-day rolling average during start up/shutdown	Continuous

[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 **J.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 63.1350(c)(1),** Subpart LLL 2006 NESHAP, installed, maintained, and continuously operate a COM located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by Subpart A, general provisions of this part, and according to PS-1 of Appendix B to Subpart 60 of this chapter. The compliance date for existing sources for visible emissions that became effective on November 8, 2010 will be September 9, 2013. **After September 9, 2013 has passed, the previous requirement for a COM will still be applicable as per AC01-267311/PSD-FL-228.**
[4] Continuous process monitors for CO and/or O_2 to optimize combustion conditions for pollution control shall be part of the process.
[5] SO_2 – 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] THC CEMs.
[8] CO in-stack emission compliance testing shall be performed on a quarterly basis using EPA Method 10. The quarterly CO test reports shall be filed with the Department in accordance with Rule 62-297.310(8), F.A.C. This test shall be conducted while firing a representative mixture of fuels (0 to 100% coal, 0 to 25% petroleum coke, 0 to 30% tires, and 0 to 5% fly ash), and while all continuous monitoring systems are functioning properly, and with all process units are operating at their permitted capacity. [Air Permit No. 0010087-015-AC]

C.18.continued:

[9] PM CEMS, **on and after 9/9/2013** you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter.
[10] HCl CEMS - See **Specific Condition No. C.33.c**.
[11] THC CEMS - THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.
[12] Mercury CEMS **on and after 9/9/2013** you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter.

[Rule 62-297.310(7)(a)4, F.A.C.; 40 CFR 63.1349 and 40 CFR 63.1350]

C.19. <u>Stack Test Conditions.</u> The manual stack test shall be conducted while firing a representative mixture of fuels (0 to 100% coal, 0 to 25% petroleum coke, 0 to 30% tires, and 0 to 5% fly ash), and while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity. 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 units 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 units are so limited, then operation at higher capacities (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.

[Rule 62-297.310(2)(b), F.A.C., and Air Permit No. 0010087-015-AC]

If the kiln is tested while firing less than 30% tires, subsequent operation is limited to 110% the percentage of tires burned during the test, not to exceed 30% of the total heat input. 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.

[Permit No. AC01-267311/PSD-FL-228; Rule 62-297.310(2)(b), F.A.C.; and Permit No. 0010087-003-AC/PSD-FL-228A]

If the kiln is tested while firing less than 25% petroleum coke, subsequent operation is limited to 110% the percentage of petroleum coke fired during the test, not to exceed 25% of the total kiln heat input. Once the kiln is so limited, then operation at a greater petroleum coke firing rate, with prior notification provided to the Department, is allowed for not more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit.

C.19.continued:

If the kiln is tested while firing less than 5% fly ash, subsequent operation is limited to 110% the percentage of fly ash fired during the test, not to exceed 5% of the total kiln heat input. Once the kiln is so limited, then operation at a greater fly ash firing rate, with prior notification provided to the Department, is allowed for not more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit.

[Air Construction Permit Nos. 0010087-001-AC and 0010087-015-AC]

C.20.a. Visible Emissions (Kiln) 2006 NESHAPS. Until 09/08/2013, **c**ompliance shall be demonstrated with use of a continuous opacity monitor. The continuous opacity monitor must comply with 40 CFR 63.1350(c)(3) which states " to remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard".

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1349(b)(1)(v); 40 CFR 63.1350(c)(3)].

C.20.b. Visible Emissions (Kiln). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for visible emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. C.20.a. no longer applies.

[40 CFR 63.1349(b)(2)]

C.21. Particulate Matter 2010 NESHAPS. The test method for particulate matter emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A and 40 CFR 63.1349 NESHAP for Portland Cement Manufacturing Industry. **On and after 09/09/2013**, PM compliance shall be demonstrated by CEMS.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64, 40 CFR 60.64(b)(2) and 40 CFR 63.1349(b)(1) subsumed]

C.22. Particulate Matter (PM_{10}). The test method for PM_{10} emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A, with all PM assumed to be PM_{10}.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64 subsumed].

C.23. Sulfur Dioxide. Compliance shall be determined with an in-stack continuous emissions monitoring system.
[Permit No. AC01-267311/PSD-FL-228 and BACT]

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

[Permit No. AC01-267311/PSD-FL-228 and BACT]

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

[Permit No. AC01-267311/PSD-FL-228 and BACT]

C.26. VOC. Prior to 9/8/13, the test method for VOC emissions shall be EPA Method 25 or Method 25A. On and after 9/9/13, VOC compliance will be based on THC CEMS.

[Permit No. AC01-267311/PSD-FL-228 and BACT]

C.27. Sulfuric Acid Mist (SAM). The test method for SAM emissions shall be EPA Method 8 in accordance with 40 CFR 60, Appendix A.

[Permit No. AC01-267311/PSD-FL-228 and BACT]

C.28. DIOX/Furan (D/F). The test method for D/F emissions shall be Method 23 in accordance with 40 CFR 60, Appendix A-7.

(a)(i) Each performance test must consist of three separate runs conducted under representative conditions. The duration of each run must be at least 3 hours, and the sample volume for each run must be at least 2.5 dscm (90 dscf).

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

(iii) Hourly average temperatures must be calculated for each run of the performance test.

(iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).

(b) *Performance test frequency.* Except as provided in §63.1348(b), performance tests are required for affected sources that are subject to a dioxin, total organic HAP, or HCl, emissions limit and must be repeated every 30 months except for pollutants where that specific pollutant is monitored using CEMS.

[40 CFR 63.1349(b)(3),(c)]

MONITORING REQUIREMENTS

C.29. Flow. The Permittee shall install and operate a continuous flow monitor.

[Permit No. AC01-267311/PSD-FL-228 and BACT]

C.30. NOx and SO_2 CEMS. Permittee shall operate the NO_x and SO_2 continuous monitoring equipment in accordance with the following:

(a) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in Appendix B of 40 CFR 60, adopted by reference at Rule 62-204.800(7)(e), F.A.C., data shall be collected concurrently by both the continuous emission monitors and the reference test methods.

(b) The span value of the continuous emission monitoring system shall be no less than 150 percent and no greater than 250 percent of the maximum permitted emissions of the inline kiln/raw mill.

(c) The 24-hour daily arithmetic averages shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume (dry basis). The 1-hour arithmetic averages shall be calculated using the one-minute data points generated by the continuous emission monitoring system. At least two data points separated by a period of 15 minutes or more shall be used to calculate each 1-hour arithmetic average.

(d) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained for 95 percent of the operating hours per calendar quarter that the plant is producing clinker. If less than 95 percent of the hourly averages for the operating hours for any given calendar quarter is available, within 45 days following the end of the quarter, the permittee will provide a report with corrective actions.

(e) All valid continuous emission monitoring system data must be used in calculating the emissions averages. When continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, for periods of time in excess of those described in specific condition 3(d), emissions data shall be obtained using other monitoring systems as approved by the Department (e.g., the reference methods in 40 CFR 60 Appendix A, Method 19, such as equation 19-19 where E_{hj} is in terms of lbs/ton clinker) to provide, as necessary, reasonable assurance.

(f) In the event the plant is not in operation and there is no data, the system records zeroes. In the event the plant is firing fuel but producing no clinker, the system records pollutant mass emissions rates (i.e., lbs/hour), but the system records zeroes for the production-normalized emission rates (i.e., lbs/ton clinker). These zeroes are not included in the calculations of rolling averages, and are removed from the tabulation.

C.30. continued:

(g) 30-day NO_X rolling average is calculated through the integrated and automated data acquisition and handling system of the continuous emission monitoring system, according to the procedures in 40 CFR 60 Appendix A, Method 19.

{Permitting note: This specific condition is in addition to the requirements of Tables I and II of this permit as well as Specific Condition 6 of the original Air Construction Permit AC01-267311 (renumbered 0010087-001-AC as amended in August 2001), as incorporated into the final Title V Air Operation Permit No. 0010087-002-AV.}

C.31. CO and/or O_2 CEMS. Continuous monitors shall be installed for CO and/or O_2 for use in determining plant operating parameters to optimize emissions of CO, NO_x, and SO_2. These monitors (CO and/or O_2) are process monitors and are not subject to 40 CFR 60, Appendix B.

[Permit No. AC01-267311/PSD-FL-228]

C.32. a. Continuous Opacity Monitors (COM). COMs shall be installed, operated, and maintained at the kiln/raw mill ESP stack pursuant to 40 CFR 60.63, and 40 CFR 60, Appendix B, Performance Specification 1 (1995 version).

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1350(c)(1)].

C.32. b. PM Emissions Tests (Continuous Emissions Monitors). On and after 9/9/2013, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b). You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in §63.1350(n). The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained. You must determine the clinker production rate using the methods in §63.1350(d). § 63.1350 *PM monitoring requirements for sources using PM CEMS.* (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of 40 CFR 60. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of § 63.1350.

[40 CFR 63.1349(b); 40 CFR 63.1350(b)]

C.32. c. <u>HCL Emissions Tests (Continuous Emissions Monitors)</u>. On and after 9/9/2013, you must conduct performance testing by the following method:

(A) You must operate a CEMS in accordance with the requirements of §63.1350(l)(1). The initial performance test must be the first 30 operating days you use the CEMS.

(B) The initial compliance test must be based on the 30 operating days in which the affected source operates using a CEMS. Hourly HCl concentration and stack gas volumetric flow rate data must be obtained.

[40 CFR 63.1349(b)(6) (ii)(A); 63.1349(b) (6)(ii)(B)]

C.32.d. <u>THC Emissions Tests (Continuous Emissions Monitors)</u>.

THC CEMS

(A) **Prior to 09/08/2013**, THC monitoring is subject to 2006 NESHAP, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(h)(1)-(h)(3):

(1) The owner or operator shall install, operate and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A, of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.

(2) The owner or operator is not required to calculate hourly rolling averages in accordance with section 4.9 of Performance Specification 8A if they are only complying with the 50 ppmv THC emissions limit.

(3) For facilities complying with the 50 ppmv THC emissions limit, any thirty-day block average THC concentration in any gas discharged from a greenfield raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a greenfield in-line kiln/raw mill, exceeding 50 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.

(B) On and after 09/09/2013, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in 2010 NESHAP §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard.

The initial compliance test must be based on the first 30 operating days of operation following **09/09/2013** in which the affected source operates using a CEMS.

C.32.d. continued:

(i) Total organic HAP emissions tests. Instead of conducting the performance test specified in paragraph (b)(4)(i) of §63.1349., you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(4)(iii) through (b)(4)(iv) of §63.1349

(ii) Method 320 of appendix A to this part or ASTM D6348–03 (incorporated by reference— See §63.14) must be used to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run must be conducted for at least 1 hour.

(iii) At the same time that you are conducting the performance test for total organic HAP, you must also determine THC emissions by operating a CEMS in accordance with the requirements of §63.1350(j). The duration of the performance test must be 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated.

[40 CFR 63.1349(b)]

C.32.e. <u>THC Monitoring Requirements</u>: On and after 09/09/2013, THC emissions must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of §63.1350. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of §63.1349.

(1) **On and after 9/9/2013**, you must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of 40 CFR 60 and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of 40 CFR 60.

[40 CFR 63. 1350(i)]

C.32.f. <u>Mercury (Hg Continuous Emissions Monitors)</u>. On and after 9/9/2013 you must operate a mercury CEMS in accordance with the requirements of §63.1350(k). The initial compliance test must be based on the first 30 operating days **after 9/9/2013** in which the affected source operates using a CEMS. Hourly mercury concentration and stack gas volumetric flow rate data must be obtained. If you use a sorbent trap monitoring system, daily data must be obtained with each day assumed to equal the daily average of the sorbent trap collection period covering that day.

(i) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in §63.1350(k)(4).

C.32.f. continued:

(ii) The emission rate must be computed by dividing the average mercury emission rate by the clinker production rate during the same 30-day rolling period using the equation 5 of this section:

$$E = (C_s Q_s)/(PK) \qquad \text{(Eq. 5)}$$

Where:

E = emission rate of mercury, lb/million tons of clinker production;

C_s= concentration of mercury, g/scm;

Q_s= volumetric flow rate of effluent gas, where $C_s$and Q_s are on the same basis (wet or dry), scm/hr;

P = total kiln clinker production rate, million ton/hr; and

K = conversion factor, 1000 g/kg (454 g/lb).

Permitting Note: Requirement effective on the September 9, 2013 Compliance Date

[40 CFR 63.1349(b)(5)]

C.33. <u>VOC- Continuous Emissions Monitors</u>. Permittee shall install, calibrate, maintain and operate a continuous emission monitoring system (CEMS) in the kiln/raw mill stack to measure and record the emissions of total hydrocarbons (THC as propane) to provide reasonable assurance that the facility will continue to meet the VOC emission limit established by permit. The CEMS system shall be installed, certified, operated and maintained in accordance with Performance Specification 8A of Appendix B of 40 CFR 60, except that the span of the THC CEMS shall be 50 ppmvd (as propane) in accordance with the requirement of **Condition C.32.d.** The CEMS shall be used in conjunction with a flow rate sensor certified in accordance with Performance Specification 6 of Appendix B, 40 CFR 60 to calculate THC emission rates. The owner or operator shall report no later than the 15th day following each calendar quarter a summary of the 30-day rolling average THC emission rates reported by the CEMS for the days of that calendar quarter to the Department's Northeast District Office. The daily averages used to compute the 30-day rolling averages shall also be provided in the summary. These results should be reported as pounds per hour of THC, and pounds of THC per ton of clinker. **After 9/9/2013, there will be a THC limit in lieu of a VOC limit.**

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

C.34. Continuous Temperature Monitor. Now and after 9/9/2013, the owner shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in- line kiln/raw, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill PM control device.

[40 CFR 63.1350(f)(1) 2006 NESHAP; 40 CFR 63.1350(g)1 2010 NESHAP]

C.35. Inspection. Inspect the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year.

[40 CFR 63.1347(a)(3)]

REPORTING

C.36. Excess Emissions. As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

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

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

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

(iii) (Not applicable.)

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

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

(vi) **On and after 9/9/2013**, monthly rolling average mercury, THC, PM, and HCl (if applicable) emissions levels in the units of the applicable emissions limit for each kiln, clinker cooler, and raw material dryer.

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

[40 CFR 63.1354(b)(8-10)]

RECORDKEEPING

C.37. 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.

[Permit No. AC01-267311/PSD-FL-228]

C.38. Coal, Tires, Raw Materials 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, petroleum coke, fly ash, natural gas, propane, 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.

[Permit No. AC01-267311/PSD-FL-228 and Air Permit No. 0010087-015-AC]

C.39. Mercury Compounds (as Hg). Until 9/8/2013, monthly sampling and analysis shall be conducted of the raw mill feed, coal, petroleum coke, fly ash and tires to demonstrate compliance with **specific condition C.5.a.,** SW-846 Method 7471 or an approved EPA, DEP or ASTM test methods shall be used and records shall be maintained for inspection. **After 9/9/2013, Hg compliance is by CEMS**.

{Permitting Note: Mercury in Natural gas is approximately nil.}

[Permit No. AC01-267311/PSD-FL-228 and Air Permit No. 0010087-015-AC]

C.40. Common Condition I.0 – I.4

C.41. Common Condition J.0 – J.13.

C.42. Common Condition K.0. –K.4.

In accordance with 40 CFR 63 Subpart LLL 2010 NESHAPS, (EU003 Kiln) is considered an existing source (construction was commenced on or prior May 6, 2009) and the standards for a new source are not applicable to these units.

Subsection D.: This section addresses the following emissions unit

EU No.	Brief Description
-004	**Clinker Handling Line 1.** This emissions unit consists of: EP01: Clinker Cooler Discharge (L-01) and breaker conveyor EP02: Clinker Silo North (L-06) EP03: Clinker Cooler (ESP) ***These silos are controlled by fabric filters and the Clinker Cooler by an electrostatic precipitator.***

{Permitting note(s): This emissions unit is regulated under 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), Subpart F - Standards of Performance for Portland Cement Plants, NSPS- 40 CFR 60 Subpart A – General Provisions, Appendix A and Appendix B, and PSD Regulations.
Pursuant to 40 CFR 63.1356, if an affected facility subject to 40 CFR 63 Subpart LLL has a different emission limit or requirement for the same pollutant under another regulation in title 40 of the CFR, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.}

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. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by Permit 0010087-006-AC/PSD-FL-228C, are incorporated by reference.

[Permit No. AC01-267311/PSD-FL-228; and, 0010087-006-AC (PSD-FL-228C)]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

D.1. Capacity. The maximum production rate for the kiln clinker shall not exceed 110.2 tons per hour (24-hr rolling average), 115.0 tons per hour (peak hourly rate) and 2650 tons per day and 800,000 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, Permit No. 0010087-006-AC (PSD-FL-228C)]

{Permitting note: The maximum rates have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

D.2. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year as long as the 800,000 ton per year clinker limit is not exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., Permit No. 0010087-006-AC (PSD-FL-228C)]

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.a. Particulate Matter (Clinker Cooler-EP03) 2006 NESHAPS. Until 9/8/2013, Particulate Matter emissions from the Clinker Cooler shall not exceed 0.08 pounds per ton of feed (dry basis) to the preheater and 0.14 pounds per ton of clinker. The PM shall also not exceed 15.4 lbs/hr and 56 tons/year.

[Permit No. AC01-267311/PSD-FL-228 and BACT, 40 CFR 60.62(b)(1), 40 CFR 60.62(d), 40 CFR 63.1345(a)(1) Permit No. 0010087-006-AC (PSD-FL-228C)]

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

D.3.b. Particulate Matter (Clinker Cooler-EP03) 2010 NESHAPS. On and after 9/9/2013, Particulate Matter emissions from the Clinker Cooler shall not exceed 0.04 pounds per ton of clinker under normal operation and 0.004 gr/dscf under startup and shutdown.

[40 CFR 63.1343(b)(1) Table 1(Rows 9 and 10)]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. D.3.a. no longer applies.

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

D.4. Particulate Matter (PM_{10}) 2006 NESHAPS . Until 9/8/2013, PM_{10} emissions from the cooler shall not exceed 0.12 pounds per ton of clinker.

[Permit No. AC01-267311/PSD-FL-228 BACT, and 0010087-006-AC (PSD-FL-228C)]

{Permitting Note: The averaging time for **Condition D.4.** is based on the run time of the specified test method. After 9/9/2013, the PM standard (0.04 lb/ton clinker) will be more stringent than the current PM10 standard. Therefore, after 09/09/2013, the PM10 standard is no longer applicable}.

D.5. Particulate Matter. Particulate Matter emissions from the EP01 and EP02 shall not exceed 0.01 grains per dry standard cubic foot.

[Permit No. 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-EP03) 2006 NESHAPS. Until 9/8/2013, visible emissions from the Clinker Cooler shall not exceed 10 percent opacity. Thereafter, a PM CEMS will be installed **2010 NESHAPS**.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.62(b)(2)]

D.7. Visible Emissions (EP01, EP02). Visible emissions shall not exceed 5 percent opacity from the Fabric Filters.

[Permit No. AC01-267311/PSD-FL-228]

{Permitting Note: The averaging time for **Condition D.7.** is based on the requirement of 40 CFR 63.1349(b)(2) and 63.1350(f)(1).}

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.a. Visible Emissions. The permittee shall test the emissions from EP 01 and EP 02 for the following pollutants annually:

Visible Emissions (V.E.)

(**See Condition D.7.)**

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

D.8.b. <u>Opacity Monitoring Requirements (EP01, EP02).</u>

On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of this section. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of 40 CFR 60, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of 40 CFR 60. The Method 9 performance test, of appendix A–4 to part 60 of 40 CFR 60, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of 40 CFR 60, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this §63.1350 for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of §63.1350.

D.8.b. continued:

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this §63.1350 apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.[40 CFR 63.1350(f)(1)(i)- (vii), (2),(3)]

{Permitting Note: Prior to 09/08/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) (1) (i) **The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.}**

D.9. a. Visible Emissions (Clinker Cooler) 2006 NESHAPS. Until 9/8/2013, compliance shall be demonstrated with use of a continuous opacity monitor. Thereafter, there will be a PM CEMS in lieu of a VE limit **2010 NESHAPS**.
[Permit No. AC01-267311/PSD-FL-228]

D.9. b. Visible Emissions (Clinker Cooler). Until 9/8/2013, the test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[40 CFR 63.1349(b)(2)]

D.10.a. Visible Emissions (EP01, EP02). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[Permit No. AC01-267311/PSD-FL-228]

In accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard or 1-hour if > 100 tpy.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

(2) There are no more than three readings of 10 percent for the first 1-hour period.

[40 CFR 63.1349(b)(2)]

D.10.b. Visible Emissions (EP01, EP02). The test method for monthly visible emissions shall be EPA Method 22.

[Rule 62-297.401(22), F.A.C.]

D.11. **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. **After 09/09/2013**, compliance shall be determined with a PM CEMS.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.64, 40 CFR 63.1350 subsumed].

D.12. Particulate Matter (PM_{10}) (EP03). Until 9/9/2013, the test method for PM_{10} emissions shall be EPA Method 5 in accordance with 40 CFR 60 Appendix A (with all PM assumed to be PM10).

[Permit No. AC01-267311/PSD-FL-228 and BACT]

D.13. Particulate Matter (EP01, 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.14.a. Continuous Opacity Monitors (COM). Now and after 09/09/2013, COMs shall be installed, operated, and maintained at the Clinker Cooler ESP stack.

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1350(d)(1)

D.14.b. Continuous Emission Monitors (CEM) 2010 NESHAPS. On and after 09/09/2013, install a PM CEMS:

(1) For a clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.

(2) You must perform Relative Response Audits annually and Response Correlation Audits every 3 years.

D.14.b. continued:

(3) If you are using a PM CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in paragraphs (n)(1) through (n)(10) of this section.

(4) In order to calculate the 30-day or 7-day rolling average, collect readings at least every 15 minutes. Sum the hourly data to daily data and then into a 30-day rolling average. You must use all data, except those recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities, in calculations.

[40 CFR 63.1350(b)]

REPORTING

D.15. Excess Emissions. As required by 40 CFR 63.1354(b)(8-10), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit. The owner or operator shall submit a summary report semiannually which contains the information specified in 40 CFR 63.10(e)(3)(vi). In addition, the summary report shall include:

(i) (Not applicable)

(ii) (Not applicable)

(iii) (Not applicable.)

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

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

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

[40 CFR 63.1354(b)(8-10)]

D.16. <u>Clinker Material Storage and Handling Activities</u>. On and after 9/9/2013, if clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:

(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials. The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.

(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.

(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.

(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.

(a) If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.

[40 CFR 63.1343 (c)-(d)]

D.17. Common Conditions I.0 – I.4.

D.18. Common Conditions J.0 – J.13.

D.19. Common Condition K.0. – K.4.

Subsection E.: This section addresses the following emissions unit

EU No.	Brief Description
-005	**Finish Grinding Operations- Line 1.** Emission Points are identified as follows: EP02: Clinker to Finish Mill – M-08 EP03: Finish Mill Air Separator- N-09 EP04: Finish Mill- N-12 EP05: Cement Handling Bucket Conveyor in the Finish Mill- N-91 EP06: Cement Storage Silo West- Q-25 EP07: Cement Storage Silo East-Q-26 *Fabric filters control particulate matter emissions.*

{Permitting note(s): This emissions unit is regulated under 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), NSPS- 40 CFR 60 Subpart F - Standards of Performance for Portland Cement Plants, Subpart A – General Provisions, Appendix A and Appendix B. Pursuant to 40 CFR 63.1356, if an affected facility subject to 40 CFR 63 Subpart LLL has a different emission limit or requirement for the same pollutant under another regulation in title 40 of the CFR, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.}

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. Table I- Allowable Opacity Limitation and Table II-Allowable Emissions as revised by Permit 0010087-006-AC (PSD-FL-228C) are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and 0010087-006-AC (PSD-FL-228C)]

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

E.1. Capacity. The maximum process rate for this emissions unit shall not exceed 150 tons per hour of cement output.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C and Air Construction Permit No. 0010087-018-AC]

{Permitting note: The maximum rates have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

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 Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot.

[Permit No. 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.

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 63.1345(subsumed)]

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

CONTINUOUS COMPLIANCE REQUIREMENTS

E. 5.a. Opacity Monitoring Requirements. (EP's 02, 05, 06 & 07). Prior to 09/08/2013, if you were subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

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

E.5.a. continued:

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

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

E.5.b. <u>Opacity Monitoring Requirements.</u> <u>(EP's 02, 05, 06 & 07)</u>. On and after 09/09/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

E.5.b. continued:

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of 40 CFR 60, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of 40 CFR 60. The Method 9 performance test, of appendix A–4 to part 60 of 40 CFR 60, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of 40 CFR 60, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this §63.1350 for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of §63.1350.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of §63.1350 apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not applicable)

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard.

E.5.b. continued:

Corrective actions must be initiated within one hour of detecting visible emissions.

[40 CFR 63.1350(f)(1)(i)- (vii), (f)(2), (f)(3); 40 CFR 60.64(b)(4); 40 CFR 63.1348(b)(3), (b)(3)(i)]

E.5.c. <u>Opacity Monitoring Requirements. (EP's 03 & 04)</u>. Now and after 09/09/2013, you are subject to a limitation on opacity under §63.1347(2006 & 2010 NESHAP), you must conduct the following required emissions monitoring:

(1)(i) For a raw mill or **finish mill**, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of 40 CFR 60. The duration of the Method 22 performance test must be 6 minutes.

(ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (f)(2)(ii) of §63.1350 from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (f)(2)(i) of the §63.1350, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of 40 CFR 60. The duration of the Method 9 test must be 30 minutes.

(2) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[(2006 NESHAPS) 40 CFR 63.1350(e)(1) and (e)(2); (2010 NESHAPS) 40 CFR 63.1350(f)(1)(i)- (vii), (2),(3)]

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.6. Visible Emissions- Compliance Testing Frequency (Each EP). The permittee shall conduct a visible emissions test at each emissions point on an annual basis, once during each federal fiscal year (October 1 – September 30).
[Rule 62-297.310(7)(a)4, F.A.C.]

E.7. Visible Emissions- Test Method (Each EP). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A-4.

In accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30, 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs(i) through (ii) of this condition apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

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

[Permit No. AC01-267311/PSD-FL-228, 40 CFR 60.64(a)(4); 40 CFR 63.1349(b)(2)]

E.8. Particulate Matter. Compliance with the visible emissions standard specified in **condition E.4.a.** shall be considered compliance with the particulate matter standard established in **condition E.3.**

[Rule 62-297.620(4), F.A.C., Permit No. AC01-267311/PSD-FL-228 and BACT]

E.9. Common Conditions J.0 – J. 13.

E.10. Common Condition K.0 – K.4.

Subsection F.: This section addresses the following emissions unit

EU No.	Brief Description
-006	**Cement Handling, Loading, and Bagging.** Emission Points are controlled by Fabric Filters and are identified as follows: EP01: Cement Silo South Loadout – Q-14 EP02: Cement Silo North Loadout – Q-17 EP03: Cement Silo Railcar Loadout- Q-21 EP04: Cement Bagging Operation- R-12

{Permitting note(s): This emissions unit is regulated under 40 CFR 63, Subparts A (National Emission Standards for Hazardous Air Pollutants General Provisions), 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), NSPS- 40 CFR 60 Subpart A – General Provisions, Appendix A and Appendix B, and 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. Pursuant to 40 CFR 63.1356, if an affected facility subject to 40 CFR 63 Subpart LLL has a different emission limit or requirement for the same pollutant under another regulation in title 40 of the CFR, the owner or operator of the affected facility must comply with the most stringent emission limit or requirement and is exempt from the less stringent requirement.}

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. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by Permit 0010087-006-AC (PSD-FL-228C), are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and 0010087-006-AC (PSD-FL-228C)]

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 Silo unloading.

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

{Permitting note: The maximum rates have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

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 Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot.

[Permit No. 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.

[Permit No. AC01-267311/PSD-FL-228; 40 CFR 60.62(c) subsumed; 40 CFR 60.62(d), 40 CFR 63. 1345 subsumed]

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

CONTINUOUS COMPLIANCE REQUIREMENTS

F.5.a. Opacity Monitoring Requirements (each EP). Prior to 09/08/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

F.5.a. continued:

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

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

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

F.5.b. <u>Continuous Opacity Compliance</u>. On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of 40 CFR 60. The Method 9 performance test, of appendix A–4 to part 60 of 40 CFR 60, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

F.5.b. continued:

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of 40 CFR 60, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of §63.1350 for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of §63.1350.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of §63.1350 apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not applicable)

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard.

Corrective actions must be initiated within one hour of detecting visible emissions.

{Permitting note: Now and after 09/09/2013, in accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard or 1-hour if > 100 tpy.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

(2) There are no more than three readings of 10 percent for the first 1-hour period.}

[40 CFR 63.1348(b)(1), (b)(3), (b)(3)(i); 40 CFR 63.1349(b)(2); and 40 CFR 63.1350(f)(1)(i)- (vii), (2),(3;]

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.6. Visible Emissions- Compliance Testing Frequency (Each EP). The permittee shall conduct a visible emissions test at each emissions point on an annual basis, once during each federal fiscal year (October 1 – September 30).
[Rule 62-297.310(7)(a)4, F.A.C.]

F.7. Visible Emissions- Test Method (Each EP). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A-4.

In accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30, 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs(i) through (ii) of this condition apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

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

[Permit No. AC01-267311/PSD-FL-228, 40 CFR 60.64(a)(3), 40 CFR 63.1349(b)(2)]

F.8. 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**.
[Permit No. AC01-267311/PSD-FL-228 BACT; and Rule 62-297.620(4) subsumed]

F.9. Common Condition J.0 – J.13.

F.10. Common Condition K.0-K.4.

Subsection G.: This section addresses the following emissions unit

EU No.	Brief Description
-007	**Coal Handling and Grinding- Line 1.** Emission Points are controlled by Fabric Filters and are identified as follows: EP01: Coal & Petroleum Coke Mill. The coal handling and grinding operation includes coal and petroleum coke S-17 EP02: Pulverized coal, petroleum coke, and fly ash storage bin- S-21 and fugitive emissions from the coal handling and storage operations. EP04: Mobile Powerscreen EP05: Mobile Powerscreen Conveyor. *The Mobile Powerscreen & Mobile Powerscreen Conveyor will operate at EU007-Coal Handling and Grinding Operation and will also service EU 001- Raw Material Handling and Storage. The Powerscreen will be a track-mounted, mobile scalping screen with a short discharge conveyor. This EP will sort oversized coal or raw material that would otherwise jam the feed hoppers or exceed grinding-mill capacity.*

{Permitting note(s): This emissions unit is regulated under NSPS- 40 CFR 60 Subpart A – General Provisions, Appendix A and Appendix B, and 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. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by Permit 0010087-006-AC (PSD-FL-228C), are incorporated by reference.

[Permit No. AC01-267311/PSD-FL-228; and, 0010087-006-AC (PSD-FL-228C)]

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. Emission Unit 007 capacity shall not be affected by the occasional use of the (EP04) Mobile Powerscreen & (EP05) Mobile Powerscreen Conveyors.

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

{Permitting note: The maximum rates have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.}

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

Emission Unit 007 operating schedule (8,760 HPY) shall not affected by the occasional use of the (EP04) Mobile Powerscreen & (EP05) Conveyors.

[Rules 62-4.160(2); 62-210.200(PTE), F.A.C. and Air Permit No. 0010087-019-AC]

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.

[Permit No. AC01-267311/PSD-FL-228; and BACT subsumed]

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

G.4. Visible Emissions (EP04 & EP05). Visible emissions shall not exceed 10 percent opacity for each identified emission point. The more restrictive (10% Opacity) requirements of 40 CFR 60.672(b) shall apply to EP04 & EP05 while operating at EU007 which has a 20% Opacity VE limit.

[Air Construction Permit No. 0010087-019-AC]

G.5. 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.

[Permit No. AC01-267311/PSD-FL-228 and BACT; 40 CFR 60.252]

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

G.6.a. Particulate Matter. Particulate Matter emissions from coal, petroleum coke, and fly ash handling facilities shall be minimized by following the procedures stated in Section II. **Facility-wide Conditions, Condition No. FW5** and these listed below:

G.6.a. continued:

- All conveyors and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal petroleum coke, and fly ash stacking/reclaiming).
- Coal, petroleum coke, and fly ash 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.5.**

[Permit No. AC01-267311/PSD-FL-228 and BACT]

G.6.b. Particulate Matter (each EP). Particulate Matter emissions from the Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot.

[Permit No. 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.}

G.7. The permittee shall test the emissions from the Coal Handling and Grinding for the following pollutants annually:

a. Visible Emissions (V.E.) EP01, EP02 & EP04 & EP05. (**See Condition G.3.)**

***NOTE 1*:** V.E. tests for EP04 & EP05 must be tested annual at EU001 or EU007.

***NOTE 2*:** Particulate Matter. Compliance with the visible emissions standard specified in **condition G.5** shall be considered compliance with the particulate matter standard established in **condition G.6.**

[Rule 62-297.310(7)(a)4, F.A.C.; Permit Nos. AC01-267311/PSD-FL-228 and 0010087-019-AC]

G.8. Visible Emissions (EP01, EP02, EP04 & EP05). The test method for visible emissions shall be EPA Method 9 in accordance with 40 CFR 60 Appendix A.

[Permit No. AC01-267311/PSD-FL-228, 40 CFR 60.254(b)(2) and 40 CFR 60.64(b)(4)]

MONITORING

G.9. Temperature. A continuous monitor for temperature shall be installed, operated, and maintained at Emission Point 01 pursuant to 40 CFR 60.253(a)(1).

[Permit No. AC01-267311/PSD-FL-228]

G.10. <u>Recordkeeping (EP10)</u>: The owner or operator shall maintain records to document the monthly and the twelve-month rolling totals of tons of coal crushed, conveyed and the hours of operation for each emissions point. These records shall be retained for five years.

[Rule 62-4.070(3), F.A.C. and Air Construction Permit No. 0010087-019-AC.]

G.11. Common Condition J.0- J.13.

Subsection H.: This section addresses the following emissions unit

EU No.	Brief Description
-008	**Clinker-to-Railcar/ Truck Transfer Conveyor.** Emission points are controlled by Fabric Filters and are defined as follows: EP01:- Conveyors EP02: Head Chute EP03: Railcar/ Truck- Loading spout

{Permitting note(s): This emissions unit is regulated under 40 CFR 63, Subparts A and LLL: National Emission Standards for Hazardous Air Pollutants- General Provisions and Portland Cement Manufacturing Industry and BACT dated December 12, 1996.}

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

H. 1. Hours of Operation (Railcar and Truck). The total hours of transfer operation are limited to 600 hours/year and **shall** be recorded.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C., Air Construction Permit No. 0010087-014-AC, dated August 22, 2005.]

H.2. Permitted Capacity. The maximum operating rates are listed below and **shall not** be exceeded without prior Department approval.

MATERIAL	EMISSION UNIT/ POINT	RATE
Cement Clinker	EU008	400 TPH and 120,000 TPY **NOTE (1)**

NOTE (1) 400 TPH is the conveyor's design rate

[Air Construction Permit No. 0010087-014-AC, dated August 22, 2005.]

H.3. **Permitted Maximum Allowable Emission Rate**. The permitted maximum allowable emission rate for each pollutant is as follows:

POLLUTANT	LOCATION	EMISSION RATE LBS/HR TPY	RULE
VE	EU008 EPs 01-03	5% Opacity	BACT **NOTE (1)**

NOTE (1) 10% Opacity from 40 CFR 63.1348 (2006 NESHAPS) & 40 CFR 63.1345 (2010 NESHAPS) is subsumed by BACT dated December 12, 1996.

TEST METHODS AND PROCEDURES

H.4. **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 63.1349(a) and Air Construction Permit No. 0010087-014-AC].

CONTINUOUS COMPLIANCE REQUIREMENTS

H.5. **Continuous Opacity Compliance (Each EP).** The permittee shall demonstrate continuous compliance with the opacity emissions standards by using the monitoring methods and procedures in §63.1350(f). See Specific Condition **H.6.**

Continuous compliance is demonstrated by conducting specified visible emissions observations and follow up opacity readings, as indicated in §63.1350(f)(1) and (f)(2).

The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard.

Corrective actions must be initiated within one hour of detecting visible emissions.

[40 CFR 63.1348(b)(3), (b)(3)(i)]

H.6.a. **Opacity Monitoring Requirements (each EP) 2010 NESHAPS). Prior to 09/08/2013,** sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

H.6.a. continued:

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

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

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

H.6.b. <u>Opacity Monitoring Requirements (each EP) 2010 NESHAPS).</u>

On and after 9/9/13, sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

H.6.b. continued:

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of this chapter. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of §63.1350 for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of §63.1350.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

H.6.b. continued:

(2) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

{Permitting note: Now and after 09/09/2013, in accordance with Rule 62-297.310(4)(a)2, F.A.C., the duration of the Method 9 performance is 30-minutes for emissions points <100 tpy of particulate matter and are not subject to a multiple-valued opacity standard or 1-hour if > 100 tpy.

Initial VE after 9/9/2013 only, the duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

(2) There are no more than three readings of 10 percent for the first 1-hour period.}

[40 CFR 63.1348(b)(1), (b)(3), (b)(3)(i); 40 CFR 63.1349(b)(2); and 40 CFR 63.1350(f)(1)(i)- (vii), (2),(3;]

REPORTING AND RECORDKEEPING REQUIREMENTS

H.7. Recordkeeping. The owner or operator shall maintain records to document the monthly and the twelve-month rolling totals of tons of clinker transferred and the hours of operation. These records shall be retained for five years.

[Air Construction Permit No. 0010087-014-AC, dated August 22, 2005.]

H.8. Test Reports. In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

[Air Construction Permit No. 0010087-014-AC, dated August 22, 2005.]

H.9. Operation & Maintenance Plan. The owner or operator shall comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347.

[Air Construction Permit No. 0010087-014-AC, dated August 22, 2005.]

H.10. Common Conditions J.0 – J.13.

H.11. Common Condition K.0. – K.4.

Subsection I. Common Conditions

EU No.	Brief Description
002	Raw Mill System - Line 1
003	Kiln System- Line 1
004	Clinker Handling- Line 1
009	Raw Mill System- Line 2
010	In line Kiln/Raw Mill- Line 2
011	Clinker Handling- Line 2

GENERAL

I.0. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by Permit No. 0010087-006-AC (PSD-FL-228C), are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and, Permit No. 0010087-006-AC (PSD-FL-228C)]

I.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.

[Permit No. AC01-267311/PSD-FL-228]

I.2. In the event that Fabric Filter 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) 256-1700, prior to disposal of the fugitive Fabric Filter or ESP catches which are to be disposed of as solid waste.

[Permit No. AC01-267311/PSD-FL-228]

I.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.

[Permit No. AC01-267311/PSD-FL-228]

I.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.

[Permit No. AC01-267311/PSD-FL-228]

Subsection J. Common Conditions

E.U. ID No.	Brief Description
001	Raw Materials Handling and Storage
002	Raw Mill System- Line 1
003	Kiln System- Line 1
004	Clinker Handling- Line 1
005	Finish Grinding Operations- Line 1
006	Cement Handling, Loading, and Bagging Operations
007	Coal Handling and Grinding Operations- Line 1
008	Clinker-to-Railcar/ Truck Transfer Conveyor
009	Raw Mill System- Line 2
010	In line Kiln/Raw Mill- Line 2
011	Clinker Handling- Line 2
012	Finish Grinding Operation- Line 2
013	Cement Load-Out Silos 6 & 7
014	Coal Handling – Mill 2

GENERAL

J.0. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by Permit No. 0010087-006-AC (PSD-FL-228C) are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and, Permit No. 0010087-006-AC (PSD-FL-228C)]

EMISSION LIMITATIONS AND STANDARDS

J.1. Emissions from the facility shall comply with the pollutant limits specified in attached Tables I and Revised Table II.

[Permit No. AC01-267311/PSD-FL-228]

PROHIBITED FUELS

J.2. Fuel Burning Emission Units 002 and 003. The burning of RCRA hazardous waste or used oil is prohibited.

[Permit No. AC01-267311/PSD-FL-228]

REPORTING

J.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.

[Permit No. 40 CFR 60.7; AC01-267311/PSD-FL-228]

MALFUNCTIONS AND PREVENTABLE UPSET CONDITIONS

J.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., Permit No. AC01-267311/PSD-FL-228]

FACILITY SHUTDOWN

J.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.

[Permit No. AC01-267311/PSD-FL-228]

TEST METHODS AND PROCEDURES

J.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.]

J.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.]

J.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.]

J.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.]

J.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.]

J .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.

J.11. continued:

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.]

J.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

J.13. Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.

[Permit No. AC01-267311/PSD-FL-228]

Subsection K. Common Conditions

E.U. ID No.	Brief Description
002	Raw Mill System- Line 1
003	Kiln System- Line 1
004	Clinker Handling- Line 1
005	Finish Grinding Operations- Line 1
006	Cement Handling, Loading, and Bagging Operations
008	Clinker-to-Railcar/ Truck Transfer Conveyor
009	Raw Mill System Line 2
010	In line Kiln/Raw Mill- Line 2
011	Clinker Handling- Line 2
012	Finish Grinding Operation- Line 2.
013	Cement Load-Out Silos 6 & 7

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

40 CFR 63, Subpart A – General Provisions Requirements

GENERAL

K.0. Table I- Allowable Opacity Limitation and Table II- Allowable Emissions, as revised by permit 0010087-006-AC (PSD-FL-228C), are incorporated by reference.

[Permit Nos. AC01-267311/PSD-FL-228; and, 0010087-006-AC (PSD-FL-228C)]

K.1. These EU(s) are subject to the applicable sections of 40 CFR 63, Subpart A-General Provisions.

{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).}

K.2. Operation and Maintenance Plans (O&M Plans). The owner or operator shall comply with the O&M Plans submitted to the Department for approval for each affected facility as required by 40 CFR 63.1347. Failure to comply with any provisions of the O&M Plans shall be a violation of the standard.

[40 CFR 63.1347(3)(b)]

K.3. Startup, Shutdown and Malfunction Plans (SSMP). The owner or operator shall comply with the SSM Plans submitted to the Department for approval for each affected facility as required by 40 CFR 63.3(e)(3). The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in Section 504(f) of the Act.

[40 CFR 63.3(e)(3)(ix)]

K.4. Reporting. As required by 40 CFR 63.10(d)(5), if any action taken by an owner or operator during startup, shutdown or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's SSM Plan, the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup. Shutdown and malfunction occurred during the reporting period. The SSM report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports. Any time an action taken by an owner or operator during a startup, shutdown or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the SSM Plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the SSM Plan and whether any excess emissions and/ or parameter monitoring exceedances are believed to have occurred.

[40 CFR 63.1354(b)(4-5)]

K5.a. § 63.1355 Recordkeeping Requirements 2006 NESHAPS Prior to 09/08/2013.

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

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

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

K.5. continued:

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

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

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the amount of CKD recycled on an hourly basis.

(f) You must keep records of all fly ash supplier certifications as required by §63.1350(o).

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006]

{NOTE: 63.1355 (e) and (f) is not applicable to EUs 002, 005, 006, 008, 009, 012 or 013}

K.5.b. <u>§ 63.1355 Recordkeeping Requirements 2010 NESHAPS On and after 09/09/2013</u>.

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

(b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and

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

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

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

K.5.b. continued:

(c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

(d) You must keep annual records of the amount of CKD which is removed from the kiln system and either disposed of as solid waste or otherwise recycled for a beneficial use outside of the kiln system.

(e) You must keep records of the daily clinker production rates and kiln feed rates.

(f) You must keep records of the occurrence and duration of each startup or shutdown.

(g)(1) You must keep records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.

(2) You must keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.1348(d) including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

{NOTE: 63.1355 (c) and (d) is not applicable to EUs 002, 005, 006, 008, 009, 012 or 013}

[64 FR 31925, June 14, 1999, as amended at 71 FR 76552, Dec. 20, 2006; 75 FR 55064, Sept. 9, 2010]

Subsection L. Specific Conditions

EU No.	Brief Description
-009	**Raw Mill System Line 2**

Note: Emissions from the raw mill are controlled by the EU-010 ESP.

Emissions unit 009 has the following visible emissions points:

EMISSION POINT	DESCRIPTION
EP01 Baghouse D33	Transfer D32-34 belts (Additive Reclaim System)
EP02 Baghouse D55	Transfer D34-36 belts (Flyash Transport)
EP03 Baghouse D37	Transfer D36-39 belts and bins (Millscale & Feldspar Transport –Line1)
EP04 Baghouse D49	D Bins unloading to belts (Raw Mill feed Transport –Line1)
EP05 Baghouse 2D37	Transfer D36-2D39 belts & bins (Millscale & Feldspar Transport-Line 2)
EP06 Baghouse 2D49	2D Bins for unloading to belts (Raw Mill Feed Transport – Line 2)
EP07 Baghouse 2E28	Airslides and bottom to airlift (Raw Meal Transport – Line 2)
EP08 Baghouse C21	Transfer C13-14 belts and D52 belt (Flyash unloading)
EP09 Baghouse 2G07	Top of Airlift and homogenizing silo (Blend Silo- Line 2)
EP10 Baghouse 2H08	Homogenizing silo to preheater feed and bin 2E30 (Kiln-Feed System- Line 2)

Particulate matter (PM) emissions from each emission point of emissions unit 009 shall not exceed 0.01 grains/dscf (3.93 lb/hour and 17.2 tons/year collectively for EP01-EP10), and PM_{10} emissions shall not exceed 0.007 grains/dscf (2.75 lb/hour and 12.09 tons/year collectively for EP01-EP10). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity (No visible emissions). **Emissions of NO_x, SO_2, CO and VOC will be controlled by emissions unit 010.**

{Emissions unit 009 is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart A. This emissions unit is also subject to the requirements of the state rules as indicated in this permit, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}

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

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

GENERAL

L.0. Table I as revised by permit 0010087-031-AC (PSD-FL-350A) are incorporated by reference.

[Permit No. 0010087-031-AC]

L.1. Hours of Operation. This emission unit may operate continuously, i.e., 8760 hours per year.

[Rule 62-210.200, F.A.C., Definitions – Potential to emit (PTE)]

EMISSION LIMITATIONS AND STANDARDS

L.2. Particulate Matter Emissions. Particulate matter **(PM) emissions from each emission point of emissions unit 009 shall not excee**d 0.01 grains/dscf (3.93 lb/hour and 17.2 tons/year collectively for EP01-EP10), and **PM_{10} emissions shall not exceed** 0.007 grains/dscf (2.75 lb/hour and 12.09 tons/year collectively for EP01-EP10). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

[Permit No. 0010087-031-AC]

L.3. Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity (No visible emissions). Demonstrate compliance with the visible emission limits annually, using EPA Method 9. This limit is stricter than the 10% opacity in 40 CFR 63. 1348 (2006 NESHAPS) and 40 CFR 63.1343(b)(1) (2010 NESHAP).

[Rule 62-297.310(7)(a)4.a., F.A.C., Permit No. 0010087-031-AC and 40 CFR 63.1343 subsumed; 40 CFR 63.1345]

L.4. Air Heater. The air heater associated with the Raw Mill – Line 2, shall be fired only with natural gas and distillate oil with a maximum rated heat input capacity of 40 MMBtu/hr.

[Permit No. 0010087-031-AC, and Rule 62-4.070(3), F.A.C.]

TEST METHODS AND PROCEDURES

L.5. Visible Emissions (Each EP). The permittee shall test the emissions from the Raw Mill System Line 2 for visible emissions (V.E.) annually, (**See Condition L.3**).

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

L.6. <u>Annual Compliance Testing for PM and PM_{10} Emissions.</u> Annual compliance testing for PM and PM_{10} emissions from this emissions unit is waived, and an alternative standard of 5% opacity (no visible emissions) is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A. On and after **09/09/2013**, VE to be conducted in accordance with 40 CFR 63.1349(b)(2).

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT and Permit No. 0010087-031-AC]

L.7.a. <u>Opacity Monitoring Requirements (Each EP)</u>. Prior to 09/08/2013, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

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

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

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

L.7.a. continued:

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

L.7.b. Opacity Monitoring Requirements (Each EP). Sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

L.7.b. continued:

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not applicable)

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[40 CFR 63.1350(f)(1)(i)- (vii), (f)(2), (f)(3); 40 CFR 60.64(b)(4)]

L.8. <u>O&M Plan for Baghouses</u>. The owner or operator shall comply with the operation and maintenance plan (O&M plan) for Emissions Unit 009. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be on file with the Department's Northeast District office.

[Permit No. 0010087-031-AC, and Rule 62-4.070(3), F.A.C.]

L.9. Common Condition I.1 – I.4.

L.10. Common Condition J.1 – J.13.

L.11. Common Condition K.1 – K.4.

Subsection M. Specific Conditions

EU No.	Brief Description
-010	**In line Kiln/Raw Mill- line 2.** The stack of the in-line kiln/raw mill- line 2 is designated by the applicant as Emission point 2E21.

Emissions unit 010 is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart A; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration and Rule 62-296.407, F.A.C., Portland Cement Plants.

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

EMISSION LIMITATIONS AND STANDARDS

M.1. Hours of Operation. These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions – potential to emit (PTE)]

M.2. a. Pollutant Emissions Limits (Until 09/08/2013). (2006 NESHAPS) Emissions shall not exceed the following limits for the following pollutants. Emissions from the natural gas fired air heater are included in the limits below.

POLLUTANT	EMISSION LIMIT		AVERAGING TIME	BASIS
PM	0.136 lb/ton of dry preheater feed; 0.23 lb/ton of clinker	28.8 lb/hr	3 hours [2]	BACT
PM_{10}	0.118 lb/ton of dry preheater feed; 0.20 lb/ton of clinker **(On & after 9/9/13 all PM must meet M.2.b.)**	25.0 lb/hr	3 hours [2]	BACT
SO_2	0.28 lb/ton of clinker	35.0 lb/hour	24 hours [3]	BACT
NOx	1.95 lb/ton of clinker	243.75 lb/hour	30 day	BACT
CO	3.6 lb/ton of clinker	450.0 lb/hour	24 hours [4]	BACT
VOC	0.12 lb/ton of clinker [1]	15.0 lb/hour [1]	30 days [5]	BACT
VE	10% opacity		6 minutes [6]	BACT
Mercury	----	122 lb/yr		BACT
DIOX (D/F)	0.20 ng per dscm (8.7 X 10^{-11} gr per dscf)(TEQ) corrected to 7 percent oxygen; or 0.40 ng per dscm (1.7 x 10^{-10} gr/dscf)(TEQ) corrected to 7 percent oxygen, when the average of the performance test run average temperatures at the inlet of the particulate matter control device is 204° C (400° F) or less.	----	(3) 3 hours runs Every 30 months	40 CFR 63.1343(b)(1)
THC	50 ppmv	----		40 CFR 63.1343(c)(4)

Specific Condition M.2.a. continued:

[1] VOC emissions shall be expressed as propane. **After 9/9/2013, there will be a THC limit in lieu of a VOC limit.**

[2] The averaging times for PM and PM_{10} correspond to the required length of sampling for the initial and subsequent emission tests.

[3] The averaging time for SO_2 shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

[4] The averaging time for CO shall be a rolling 24-hr average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

[5] The averaging time for VOC shall be a 30-day block average specified in 40 CFR 63.1350(h).

[6] The averaging time for visible emissions shall be a 6-minute block average that shall be computed from a minimum of one measurement every 15 seconds. The 6 minute block averages shall start at the beginning of each hour.

These emission limits, along with annual production limits, effectively limit annual emissions to: PM, 125.9; PM_{10}, 109.5; SO_2, 153.3; NO_x, 1,067.63 (after year one); CO, 1,971.0 (including 30-day average for first 180 days); and VOC, 65.7 tons per year. First year NOx emissions are effectively limited to 1,595.4 tons per year. Mercury introduced into the pyroprocessing system is limited pursuant to **Specific Condition No. M.11** of this subsection of this permit; annual emissions of mercury are effectively limited by this condition to 122 pounds per year.
[Rules 62-4.070(3) and 62-212.400, F.A.C., and BACT]

M.2.b. <u>Pollutant Emissions Limits (After 09/09/2013)</u>. (2010 NESHAPS) Emissions shall not exceed the following limits for the following pollutants. Emissions from the natural gas fired air heater are included in the limits below.

POLLUTANT	EMISSION LIMIT	AVERAGING TIME	BASIS
PM	0.04 lb/ton of clinker (normal operation); and 0.004 gr/dscf (startup and shutdown)	CEMS	BACT 40 CFR 63.1343(b)(1)
Mercury (Hg)	10 ug/dscm during startup and shutdown and 55 lb/MM tons clinker during normal operation.	CEMS	40 CFR 63.1343(b)(1)
Hydrogen Chloride HCL	3[3] ppmvd Startup and shutdown	CEMS	40 CFR 63.1343(b)(1)
THC[6]	24 [1,2] ppmvd Startup and shutdown	CEMS	40 CFR 63.1343(b)(1)
SO_2	0.28 lb/ton of clinker	35.0 lb/hour	24 hours [4]
NOx	1.95 lb/ton of clinker	243.75 lb/hour	30 day
CO	3.6 lb/ton of clinker	450.0 lb/hour	24 hours [5]

[1]Measured as propane.

[2] Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 9 ppmvd for total organic HAP. If the source demonstrates compliance with the total organic HAP under the requirements of §63.1349 then the source's THC limit will be adjusted to equal the average THC emissions measured during the organic HAP compliance test.

[3] If the kiln does not have a HCl CEM, the emissions limit is zero.

[4] The averaging time for SO_2 shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

[5] The averaging time for CO shall be a rolling 24-hr average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

M.2.b. continued:

[6] **After 9/9/2013, there will be a THC limit in lieu of a VOC limit.**

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM, Hg, HCL, THC emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limits of Specific Condition No. M.2.a. for PM, Hg, THC emissions (only) no longer apply.

M.3. Particulate Matter. No owner or operator of a Portland Cement kiln shall cause, permit, or allow the emission of particulate matter in excess of 0.30 pounds per ton to the kiln (dry basis, excluding fuel), or visible emissions the density of which is greater than 20 percent opacity.

[Rule 62-296.407(2)(a), F.A.C.; Air Construction Permit No. 0010087-021-AC]

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. M.3. PM no longer applies.

M.4. Fuels. Fuels fired in the pyroprocessing system (kiln and calciner) shall not exceed a total maximum heat input of 400 million Btu per hour (MMBtu/hr) and shall consist only of natural gas, coal, distillate oil, petroleum coke, flyash, and whole tires. Propane may be fired for startup only and shall not exceed a maximum hourly rate of 4,255 gallons/hr.

a. Whole tires may be fired directly in the pyroprocessing system at a rate not to exceed a maximum heat input of 30% of the total pyroprocessing heat input, not to exceed 120.0 MMBtu/hr at any time. The remaining 70% of the total pyroprocessing heat input shall be derived from firing coal, flyash, natural gas, distillate fuel oil, or petroleum coke. Whole tires fired in this manner 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 be designed with a double airlock.

[Rules 62-4.070(3) and 62-210.200, F.A.C., Definitions -- potential to emit (PTE), F.A.C., and Applicant request, application received 11/5/04; Air Construction Permit No. 0010087-031-AC]

M.5. Fuels and Materials Not Allowed. The owner or operator shall not introduce hazardous wastes, petroleum contaminated soil or materials, used oil, oil fuels, solid fuels other than those allowed by this permit, or solid wastes other than whole tires into any part of the process or emission control equipment.

[Rule 62-4.070(3), F.A.C.; Air Construction Permit No. 0010087-031-AC]

M.6. Process Rate Limitations. The kiln shall not process more than 212 tons of dry preheater feed and dry flyash per hour (24-hour average) and shall not produce more than 125 tons of clinker per hour (24-hour average). The facility shall not produce more than 156 tons of Portland cement, masonry cement, and other specialty products per hour (30 day average). Process and production rates shall be further limited to 1,857,120 tons of dry preheater feed and dry flyash in any consecutive 12-month period, 1,095,000 tons of clinker in any consecutive 12-month period, and 1,366,560 tons of Portland cement in any consecutive 12-month period.

The clinker production rate identified in the above paragraph shall be determined by the following equation:

Clinker Production = [(Feed)(Kiln Feed LOI Factor) + (Fly Ash Injection)(Fly Ash LOI Factor)]

Where:

- Kiln feed is determined by the Poldos control system.
- Fly ash is determined from the rotary feed system or equivalent.
- LOI for the kiln feed and fly ash is based on a monthly average determined from daily measurements.

Also see Specific Condition No. M.26.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); Air Construction Permit No. 0010087-031-AC]

M.7. Cement Kiln Dust. Cement kiln dust shall be recirculated in the process and shall not be directly discharged from process or emission control equipment unless authorized by the Department. Cement kiln dust removed from process equipment during maintenance and repair shall be confined and controlled at all times and shall be managed in accordance with the applicable provisions of 40 CFR 261.

[Rule 62-4.070(3), F.A.C.; Air Construction Permit No. 0010087-031-AC]

M.8. Whole Tire Management. Tires and tire derived fuel shall be stored, handled and managed in accordance with the provisions of Rule 62-711, F.A.C.

[Rule 62-4.070(3), F.A.C.; Air Construction Permit No. 0010087-031-AC]

M.9. O&M Plan for ESP. The owner or operator shall adhere to the operation and maintenance plan (O&M plan) for emissions unit 010. The O&M plan address the schedule for inspection of this equipment and required preventive maintenance and required records of the condition of the equipment upon each inspection and any maintenance activities performed.

[Rule 62-4.070(3), F.A.C.; Air Construction Permit No. 0010087-031-AC]

COMBUSTION AND PROCESS CONTROL TECHNOLOGY

M.10. Combustion and Process Control Technology. The owner or operator shall comply with the installed selective noncatalytic reduction (SNCR) and multistage combustion (MSC). The owner or operator shall use SNCR and/or MSC for control of NOx emissions. The owner or operator shall control emissions of CO and VOC through control of the combustion process. The owner or operator shall control emissions of SO_2 through design and control of the clinker production process.

[Rules 62-4.070(3) and 62-212.400, F.A.C., BACT; and Air Construction Permit No. 0010087-031-AC]

[Note: The emission limits for particulate matter and visible emissions imposed by Rule 62-212.400 and BACT are as stringent or more stringent than the limits imposed by the applicable NSPS or NESHAP rules. However, the BACT requirements do not waive or vary any monitoring or record keeping requirements of the NSPS and NESHAP rules.]

M.11. Mercury into the Pyroprocessing System Limited. **Until 9/8/2013,** the total mass of mercury compounds introduced into the pyroprocessing system, expressed as Hg, in raw mill feed and fuels shall not exceed 122 pounds per consecutive 12-month period. Annual emissions based on materials and fuel analysis. **On September 9, 2013, this Hg emission limit no longer applies.**

[62-4.070(3), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

M.12. Hydrated Lime Injection. The owner or operator shall control emissions of SO_2 through design and control of the clinker production process. The owner or operator shall use hydrated lime injection or other control techniques when necessary to achieve the SO_2 emission limits.

[Rule 62-4.070(3), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

TEST METHODS AND PROCEDURES

M.13. Performance Testing. The owner or operator shall notify the Department prior to initiating any significant change in the raw materials or fuel used in the most recent performance test for D/F or PM. For purposes of this condition this includes but is not necessarily limited to any change in the physical or chemical properties of a raw material [Note: this includes the LOI of flyash] or fuel that is outside of the normal range of monitored parameters; the use of a raw material or fuel not previously used; or a change between non-beneficiated flyash and beneficiated flyash. Based on the information provided, the Department will promptly determine if performance testing pursuant to 40 CFR 63.1349 will be required for the new raw material or fuel.

M.13. continued:

A significant change shall not include switching to a raw material/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM emission limits.

[62-4.070(3), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

COMPLIANCE MONITORING

M.14.a. Continuous Opacity Monitor (COM) Systems. **C**ontinuous opacity monitor (COM) systems shall be installed, operated, and maintained at the kiln/raw mill ESP outlet and the outlet of the clinker cooler ESP pursuant to 40 CFR 60.63.

[Air Construction Permit No. 0010087-031-AC]

M.14.b. Continuous Emission Monitor (CEM) Systems. A continuous emission monitor for emissions of total hydrocarbon is required pursuant to 40 CFR 63.1349 and 63.1350. A continuous monitor for the temperature at the inlet to the in-line kiln/raw mill ESP is required pursuant to 40 CFR 63.1349 and 63.1350.

M.15. CEM System Requirements (THC). The calibration, maintenance, operation, record keeping, and reporting of the CEM system shall comply with the requirements of 40 CFR 60.7 and 60.13; 40 CFR 60 Appendix B, Performance Specifications; and, Appendix F, Quality Assurance Procedures. [Rules 62-4.070(3), 62-210.800 and 62-297.520, F.A.C., and BACT]

[Note: 40 CFR 60 Appendix B and Appendix F have been omitted for brevity. See the Code of Federal Regulations for the text of these sections; and Air Construction Permit No. 0010087-031-AC.]

M.16. Emission Tests Required. In addition to the continuous monitoring requirements of this permit, the owner or operator shall demonstrate compliance with the emission limits of this permit for emissions unit 010 annually using the test methods of 40 CFR 60 Appendix A and 40 CFR 61 Appendix B specified below**.**

The tests conducted annually for the relative accuracy test audit (RATA) for the CEM system may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests.

POLLUTANT	TEST METHOD
PM	Method 5 [1]
PM_{10}	Method 5, assuming all PM measured is PM_{10}
SO_2	Method 6 or 6C
NOx	Method 7 or 7E [2]

M.16. continued:

Pollutant	Test Method
VE	Method 9
CO	Method 10 or 10A
VOC	Method 25 or 25A
DIOX/Furan (D/F)	Method 23[3]

[1] The minimum sample volume shall be 30 dry standard cubic feet.
[2] NOx emissions testing shall be conducted with the air heater operating at the highest heat input possible during the test.
[3]For Diox/Furan, the permittee shall demonstrate compliance every 30 months pursuant to 63.1349(c).

Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity.

[40 CFR 63.1349; Rules 62-4.070(3), 62-296.701(4)(a), (c) and (d), and 62-297.310(7), F.A.C. and BACT]

{Permitting Notes:

- PM CEMS, on and after **09/09/2013** you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of this chapter. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of this chapter.
- HCl CEMS - See **Specific Condition No. M.24.b.**
- THC CEMS - THC **continuous emission monitorin**g system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.
- Mercury CEMS- On and after **09/09/2013** you must install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A of appendix B to part 60 of this chapter or a sorbent trap-based integrated monitoring system in accordance with Performance Specification 12B of appendix B to part 60 of this chapter.
- **After 09/09/2013**, VE Method 9 no longer applicable (PM CEMS)}

[Rule 62-297.310(7)(a)4, F.A.C.; 40 CFR 63.1349 and 40 CFR 63.1350]

M.17. Emission tests shall be conducted for the pollutants in **Condition M.16.**, under the fuel firing scenario representing the highest potential for generating emissions. Changes in operating conditions that may affect the emissions of any pollutant specified in **Condition M.16** shall be noticed to the Department 60 days prior to such change or as soon as practical where 60 days advanced notice is not feasible.
[Rules 62-4.070(3), F.A.C.]

M.19. Malfunction of the SNCR System. Malfunction of the SNCR System is defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia based solutions into the kiln system. In accordance with the limits in **Specific condition No. M.2.**, the exclusion of NOx data collected during periods of malfunction and/or repair of the SNCR system is allowed when demonstrating compliance with the 30 day NOx standard. No more than 6 hours per calendar day and no more than 30 hours in any 30 day operating block may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Northeast District of any malfunction of the SNCR system.

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

M.19. Data Exclusion for CO. In accordance with the limits in **Condition M.2,** the exclusion of CO data collected during periods of startup, shutdown, and malfunction of the kiln system is allowed when demonstrating compliance with the 24-hour lb/ton CO standard. No more than 7 hours per calendar day and no more than 28 hours in any calendar month may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Northeast District of any startup, shutdown, or malfunction of the system which an exclusion of data will occur. [Rules 62-4.070(3), F.A.C.]

[Note: 40 CFR 60 Appendix A has been omitted for brevity. See the Code of Federal Regulations for the text of this section.]

REPORTING AND RECORD KEEPING REQUIREMENTS

M.20. Records of Process and Production Rates. The owner or operator shall make and maintain records of the process rate of dry preheater feed in units of tons per hour and tons per consecutive 12-month period, and the production rate of clinker and cement in units of tons per hour and tons per consecutive 12-month period. The owner or operator shall make and maintain records of the production of Portland cement in units of tons per consecutive 12-month period. Records in units of tons per hour shall be based on either hourly averages or daily averages and shall be completed no later than the day following the day of the record. Records in units of tons per consecutive 12-month period shall be made from monthly records of process and production rates for the past 12 months, and shall be completed no later than the 10th day of each following month.

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

M.21. Records of Fuels and Heat Input. The owner or operator shall record the fuel firing rate continuously. The owner or operator shall maintain records of the quantity and representative analysis of fuels purchased, and such records shall include the sulfur content, heat content and, for coal, petroleum coke, natural gas, fuel oil, propane, flyash, and whole tires, and the proximate and ultimate analyses.

M.21. continued:

The owner or operator shall make and maintain records of heat input to the pyroprocessing system on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel firing rate by the heating value representative of that fuel from the records of fuel analysis. Such records shall be completed for each block-hour, within 15 minutes of the end of each block-hour.

[Permit No. 0010087-031-AC, and Rule 62-4.070(3), F.A.C.]

M.22. Material Balance Records of Mercury. **Until 9/9/2013**, the owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and making and maintaining records of monthly and rolling 12-month mercury throughput. The owner or operator shall, for each month of sampling required by this condition, perform daily sampling of the raw mill feed, coal, petroleum coke, and tires, and shall composite the daily samples each month, and shall analyze the monthly composite sample to determine mercury content of these materials for the month. The owner or operator shall determine the mass of mercury introduced into the pyroprocessing system (in units of pounds per month) from the total of the product of the mercury content from the monthly composite analysis and the mass of each material or fuel used during the month. The consecutive 12-month record shall be determined from the individual monthly records for the current month and the preceding eleven months and shall be expressed in units of pounds of mercury per consecutive 12-month period. Such records shall be completed no later than 25 days following the month of the records. To determine the mercury content of the feed material and fuels to be used in the monthly calculation, sampling and analysis shall be performed in accordance with the following schedule:

i. During the first quarter of plant operation, sample each month analyze each month's composite sample.

ii. After the first quarter, sample for one month of each quarter and analyze that month's composite sample.

[Rule 62-4.070(3), F.A.C.; and Permit No. 0010087-031-AC]

M.23. Records of Startup, Shutdown and Malfunction. The owner or operator shall make and maintain records of periods of startup, shutdown and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions.

[Permit No. 0010087-031-AC, and Rule 62-4.070(3), F.A.C.]

MONITORING REQUIREMENTS

M.24.a. PM Emissions Tests (Continuous Emissions Monitors). On and after 9/9/2013, sources subject to the limitations on emissions of PM, you must install, operate, calibrate, and maintain a PM CEMS in accordance with the requirements in §63.1350(b). You must determine, record, and maintain a record of the accuracy of the volumetric flow rate monitoring system according to the procedures in **§63.1350(u)**.

M.24. continued:

The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly PM concentration and stack gas volumetric flow rate data must be obtained. (ii) You must determine the clinker production rate using the methods in **§63.1350(d)**.
§ 63.1350 *PM monitoring requirements for sources using PM CEMS.* (1) For a kiln or clinker cooler subject to emissions limitation on particulate matter emissions in §63.1343(b) and using a PM CEMS, you must install and operate a continuous emissions monitor in accordance with Performance Specification 11 of appendix B and Procedure 2 of appendix F to part 60 of 40 CFR 60. The performance test method and the correlation test method for Performance Specification 11 must be Method 5 or Method 5i of appendix A to Part 60 of 40 CFR 60. You must also develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of §63.1350.
[40 CFR 63.1349(b); 40 CFR 63.1350(b)]

M.24.b. <u>HCL Emissions Tests</u>. For a source subject to limitations on HCl emissions **on and after 9/9/2013**, you must conduct performance testing by the following methods:

(i)(A) (Not Applicable).

(B) (Not Applicable).

(ii)(A) **On and after 09/09/2012**, you must operate a CEMS in accordance with the requirements of §63.1350(l)(1). The initial performance test must be the first 30 operating days you use the CEMS.

(B) The initial compliance test must be based on the 30 operating days in which the affected source operates using a CEMS. Hourly HCl concentration and stack gas volumetric flow rate data must be obtained.

Permitting Note: Requirement effective on the September 9, 2013 Compliance Date

[40 CFR 63.1349(b)(6)(ii)]

M.24.c. <u>THC Emissions Tests (Continuous Emissions Monitors)</u>. Before and after 09/09/2013, (A) If you are subject to limitations on THC emissions, you must operate a continuous emissions monitoring system (CEMS) in accordance with the requirements in §63.1350(i). For the purposes of conducting the accuracy and quality assurance evaluations for CEMS, the THC span value (as propane) is 50 ppmvd. You demonstrate compliance with a RATA when the accuracy between the CEMS and the test audit is within 20 percent or when the test audit results are within 10 percent of the standard (B) The initial compliance test must be based on the first 30 operating days of operation in which the affected source operates using a CEMS.

(ii) Total organic HAP emissions tests **before and after 09/09/2013**. Instead of conducting the performance test specified in paragraph (b)(4)(i) of §63.1349, you may conduct a performance test to determine emissions of total organic HAP by following the procedures in paragraphs (b)(4)(iii) through (b)(4)(iv) of §63.1349.

(iii) Method 320 of appendix A to this part or ASTM D6348–03 (incorporated by reference— See §63.14) must be used to determine emissions of total organic HAP. Each performance test must consist of three separate runs under the conditions that exist when the affected source is operating at the representative performance conditions in accordance with §63.7(e). Each run must be conducted for at least 1 hour.

(iv) At the same time that you are conducting the performance test for total organic HAP, you must also determine THC emissions by operating a CEMS in accordance with the requirements of §63.1350(j). The duration of the performance test must be 3 hours and the average THC concentration (as calculated from the 1-minute averages) during the 3-hour test must be calculated.
[40 CFR 63.1349(b)(4)(i)]

THC emissions must comply with the monitoring requirements of paragraphs (i)(1) and (i)(2) and (m)(1) through (m)(4) of §63.1350. You must also develop an emissions monitoring plan in accordance with paragraphs (p)(1) through (p)(4) of §63.1350.

(1) You must install, operate, and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8 of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part. The owner or operator must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of appendix F in part 60 of 40 CFR 60.

[40 CFR 63. 1350(i)]

M.24.d. <u>Mercury (Hg) Continuous Emissions Monitors</u>. If you are subject to limitations on mercury emissions, you must operate a mercury CEMS in accordance with the requirements of §63.1350(k) on and after **9/9/2013**. The initial compliance test must be based on the first 30 operating days in which the affected source operates using a CEMS. Hourly mercury concentration and stack gas volumetric flow rate data must be obtained. If you use a sorbent trap monitoring system, daily data must be obtained with each day assumed to equal the daily average of the sorbent trap collection period covering that day.

M.24.d. continued:

(i) If you are using a mercury CEMS, you must install, operate, calibrate, and maintain an instrument for continuously measuring and recording the exhaust gas flow rate to the atmosphere according to the requirements in §63.1350(k)(4).

Permitting Note: Requirement effective on the September 9, 2013 Compliance Date

[40 CFR 63.1349(b)(5)]

M.25. **Continuous Emission Monitoring Systems (CEMS)**. The owner or operator shall calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the in-line kiln/raw mill stack to measure and record the emissions of NOx, SO_2, CO and VOC from the in-line kiln/raw mill, in a manner sufficient to demonstrate compliance with the emission limits of this permit. Compliance with the emission limit for NOx and the initial 30-day CO limit shall be based on a 30-day calendar rolling average that shall be recomputed daily from the individual hourly averages. Compliance with the emission limit for SO_2 and the 24-hour CO limits shall be based on a rolling 24-hour average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours. Each hourly average shall be computed from a minimum of one measurement every minute. Compliance with the 30 day emission limit for VOC shall be based on a 30 day block average that shall be computed from a minimum of one measurement every minute. The CEM system shall express the results in units of pounds per ton of clinker produced, and pounds per hour.

[Rule 62-4.070(3), F.A.C., BACT; and Air Construction Permit No. 0010087-031-AC]

M.26. Clinker Production Monitoring Requirements (2010 NESHAPS). On and after 09/09/13, sources subject to an emissions limitation on particulate matter, mercury, NO_X, or SO_2emissions (lb/ton of clinker), you must:

(1) Determine hourly clinker production by one of two methods:

(i) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of clinker produced. The system of measuring hourly clinker production must be maintained within ±5 percent accuracy.

(ii) Install, calibrate, maintain, and operate a permanent weigh scale system to measure and record weight rates in tons-mass per hour of the amount of feed to the kiln. The system of measuring feed must be maintained within ±5 percent accuracy. Calculate your hourly clinker production rate using a kiln specific feed to clinker ratio based on reconciled clinker production determined for accounting purposes and recorded feed rates. This ratio must be updated monthly. Note that if this ratio changes at clinker reconciliation, you must use the new ratio going forward, but you do not have to retroactively change clinker production rates previously estimated.

M.26. continued:

(2) Determine, record, and maintain a record of the accuracy of the system of measuring hourly clinker production (or feed mass flow if applicable). During each quarter of source operation, you must determine, record, and maintain a record of the ongoing accuracy of the system of measuring hourly clinker production (or feed mass flow).

(3) Record the daily clinker production rates and kiln feed rates; and

(4) Develop an emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) of this section.

[40 CFR 63.1350(d)]

M.27. Common Condition I.0 – I.4

M.28. Common Condition J.0 – J.13.

M.29. Common Condition K.0. –K.4.

In accordance with 40 CFR 63 Subpart LLL (2010), (EU010 In-Line Kiln/ Raw Mill-Line 2) is considered an existing source (construction was commenced on or prior to May 6, 2009) and the standards for a new source are not applicable to these units.

Subsection N. Specific Conditions

EU No.	Brief Description
-011	**Clinker Handling –Line 2.** This emissions unit includes the stack of the clinker cooler, designated by the applicant as 2K15. Particulate matter emissions from this emissions point shall be controlled by an electrostatic precipitator.

In addition, baghouses are used to control emissions from the following emission points:

EMISSION POINT	DESCRIPTION
2L03	Cooler Discharge
2L12	Clinker into Silo #3
2L13	Clinker Transport (2L20, 2L08)
2L15	Clinker Transport (2L20, silo L07-02, 2L09)
2L16	Clinker Transport (2L01, 2L20)
2L18	Clinker to Silo #4

Subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration and Rule 62-296.407, F.A.C., Portland Cement Plants.

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

EMISSION LIMITATIONS AND STANDARDS

N.1. Hours of Operation. These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]

N.2.a. Particulate Matter (2006 NESHAPS). No owner or operator of a Portland Cement clinker cooler shall cause, permit, or allow the emission of particulate matter in excess of 0.10 pounds per ton of feed to the kiln (dry basis, excluding fuel), or visible emissions the density of which is greater than 20 percent opacity.

After 09/09/13, the Clinker Cooler VE is no longer applicable.

[Rule 62-296.407(2)(b), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

N.2.b. Particulate Matter (2010 NESHAPS). On and after 09/09/2013, particulate emissions shall not exceed 0.04 lb/ton of clinker (normal operation); and 0.004 gr/dscf (startup and shutdown).

Pursuant to 40 CFR 63.1351(c), the compliance date for existing sources for PM emissions that became effective on November 8, 2010 will be September 9, 2013. On September 9, 2013, the previous limit of Specific Condition No. N.2. a., PM emissions no longer applies.

N.3. Pollutant Emissions Limits (All EPs). Emissions shall not exceed the following limits for the following pollutants:

POLLUTANT	EP	EMISSION LIMIT		AVERAGING TIME	BASIS
PM- ESP Cooler	2K15	0.06 lb/ton of dry preheater feed; 0.1 lb/ton of clinker	12.5 lb/hour	3 hours [1]	BACT
PM- Baghouse	All, except ESP	0.01 gr/dscf	1.64 lb/hour	3 hours [1]	BACT
PM total	All		14.14 lb/hour		
PM_{10} - ESP	2K15	0.05 lb/ton of dry preheater feed; 0.08 lb/ton of clinker	10.0 lb/hour	3 hours [1]	BACT
PM_{10} - Baghouse	All, except ESP	.007 gr/dscf	1.15 lb/hr	3 hours [1]	BACT
PM_{10} total	All		11.15 lb/hr		
VE	All, except ESP	10% opacity[3]		6 minutes [2]	BACT

[1] The averaging times for PM and PM_{10} correspond to the required length of sampling for the initial and subsequent emission tests.

On and after 09/09/13 the 2010 NESHAP for PM10 standard will be more stringent than the current PM standard. All PM must meet the new standard.

N.3. continued:

[2] The averaging time for visible emissions shall be a 6-minute block average computed from a minimum of one measurement every 15 seconds. The 6 minute block averages shall start at the beginning of each hour.

[3] **On and after 09/09/13 the 2010 NESHAP, VE compliance for the Clinker Cooler will be by PM CEMS**.

{Permitting Note: These emission limits, along with annual production limits, effectively limit annual emissions to: PM, 60.0 and PM_{10}, 47.5 tons per year.}

[Rules 62-4.070(3), 62-210.700(5) and 62-212.400, F.A.C., BACT; and Air Construction Permit No. 0010087-031-AC]

[Note: The BACT emission limits of this permit (**Table in N.3.)** are more stringent than the limits imposed by this rule.]

N.4. O&M Plan for Baghouses and ESP. The owner or operator shall adhere to the operation and maintenance plan (O&M plan). The O&M plan addresses the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed.

[Rule 62-4.070(3), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

TEST METHODS AND PROCEDURES

N.5. Emissions Tests Required. In addition to the continuous monitoring requirements of this permit, the owner or operator shall demonstrate compliance with the emission limits of this permit for emissions unit 011 **annually** using the test methods of 40 CFR 60 Appendix A and 40 CFR 61 Appendix B specified below. **The tests conducted annually for the relative accuracy test audit (RATA) for the CEM system may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests.**

POLLUTANT	TEST METHOD
PM	Method 5 [1]
PM_{10}	Method 5, assuming all PM measured is PM_{10}
VE	Method 9

[1]The minimum sample volume shall be 30 dry standard cubic feet.
On and after 09/09/2013, clinker cooler PM & VE compliance is by CEMS.
Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity.

[Rules 62-4.070(3), 62-296.701(4)(a), (c) and (d), and 62-297.310(7), F.A.C.; BACT and Air Construction Permit No. 0010087-031-AC]

N.6. **Material Storage and Handling Activities**. **On and after 09/09/2013**, if clinker material storage and handling activities occur more than 1,000 feet from the facility property-line you must comply with the following:

(1) Utilize a three-sided barrier with roof, provided the open side is covered with a wind fence material of a maximum 20 percent porosity, allowing a removable opening for vehicle access. The removable wind fence for vehicle access may be removed only during minor or routine maintenance activities, the creation or reclamation of outside storage piles, the importation of clinker from outside the facility, and reclamation of plant clean-up materials.

The removable opening must be less than 50 percent of the total surface area of the wind fence and the amount of time must be minimized to the extent feasible.

(2) Contain storage and handling of material that is immediately adjacent to the three-sided barrier within an area next to the structure with a wind fence on at least two sides, with at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering, and completely cover the material with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities.

(3) Storage and handling of other active clinker material must be conducted within an area surrounded on three sides by a barrier or wind fences with one side of the wind fence facing the prevailing wind and at least a 5-foot freeboard above the top of the storage pile to provide wind sheltering. The clinker must remain completely covered at all times with an impervious tarp, revealing only the active disturbed portion during material loading and unloading activities. The barrier or wind fence must extend at least 20 feet beyond the active portion of the material at all times.

(4) Inactive clinker material may be alternatively stored using a continuous and impervious tarp, covered at all times, provided records are kept demonstrating the inactive status of such stored material.

(d) If clinker material storage and handling activities occur 1,000 feet or less from the facility property-line these activities must be in an enclosed storage area that meets the emissions limits specified in §63.1345.

[40 CFR 63.1343(c)-(d)]

N. 7. Common Condition I.0 – I.4

N. 8. Common Condition J.0 – J.13.

N. 9. Common Condition K.0. –K.4.

Subsection O. Specific Conditions

EU No.	Brief Description
-012	**Finish Grinding Operation- Line 2**. Emissions unit 012 shall have the following emission points controlled by following baghouses:

EMISSION POINT	DESCRIPTION
Baghouse 2M07	Clinker from Silos 3 and 4 (Clinker to Finish Mill -2)
Baghouse 2N09	Finish Mill #2 air separator
Baghouse 2N12	Finish Mill #2
Baghouse 2N91	Airlift to separator (Finish Mill Elevator & Airslides)
Baghouse 2N36	Cement to fringe silo
Baghouse 2Q25	Cement to silo #6
Baghouse 2Q26	Cement to silo # 7

Emissions unit 012 is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration and Rule 62-296.407, F.A.C., Portland Cement Plants.

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

EMISSION LIMITATIONS AND STANDARDS

O.1. Hours of Operation. These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]

O.2. Particulate Matter. Particulate Matter (PM) emissions from each emission point of emissions unit 012 shall not exceed 0.01 grains/dscf**.** Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse. PM emissions for all emission points in this emission unit are limited to 14.51 lb/hr and 63.6 tons per year.

[40 CFR 60.62 (c); and Air Construction Permit No. 0010087-031-AC]

O.3. PM10 Emissions. PM_{10} emissions shall not exceed 0.007 grains/dscf. PM_{10} emissions for all emission points in this emission unit are limited to 10.16 lb/hr and 44.49 tons per year.

[Air Construction Permit No. 0010087-031-AC]

O.4. Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[More stringent BACT; Air Construction Permit No. 0010087-031-AC; 40 CFR 63.1345 subsumed]

CONTINUOUS COMPLIANCE REQUIREMENTS

O.5.a. Continuous Opacity Compliance (EPs 2M07, 2N91, 2N36, 2Q25 & 2Q26): Prior to 09/08/2013, if you were subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)-(a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

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

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

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

O.5.a. continued:

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

O.5.b. <u>Continuous Opacity Compliance (EPs 2M07, 2N91, 2N36, 2Q25 & 2Q26</u>): On and after 9/9/2013, sources subject to a limitation on opacity under §63.1345, (2010 NESHAP) you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

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

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

O.5.b. continued:

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not applicable)

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

The maximum 6-minute average opacity exhibited during the performance test period must be used to determine whether the affected source is in compliance with the standard.

Corrective actions must be initiated within one hour of detecting visible emissions.

[40 CFR 63.1350(f)(1)(i)- (vii), (f)(2), (f)(3); 40 CFR 60.64(b)(4); 40 CFR 63.1348(b)(3), (b)(3)(i)]

O.5.c. Opacity Monitoring Requirements (EPs 2N09 and 2N12). Now and after 09/09/2013, you are subject to a limitation on opacity under §63.1347(2006 & 2010 NESHAP), you must conduct the following required emissions monitoring:

(1)(i) For a raw mill or **finish mill**, you must monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to part 60 of 40 CFR 60. The duration of the Method 22 performance test must be 6 minutes.

(ii) Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.

(iii) If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (f)(2)(ii) of §63.1350 from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (f)(2)(i) of the §63.1350, you must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to part 60 of 40 CFR 60. The duration of the Method 9 test must be 30 minutes.

(2) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of §63.1350, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[(2006 NESHAPS) 40 CFR 63.1350(e)(1) and (e)(2); (2010 NESHAPS) 40 CFR 63.1350(f)(1)(i)- (vii), (2),(3)]

TEST METHODS AND PROCEDURES

O.6. Particulate Matter & PM_{10} Testing (EPs 2N09 and 2N12). For emission points 2N09 and 2N12, compliance testing for PM and PM_{10} emissions from these emission points are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C.

[Rule 62-297.620(4), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

O.7. Particulate Matter & PM_{10} Testing (For all other EPs of EU012). Annual compliance testing for PM emissions from these emission points are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A (1997 version).

The particulate weight emission standard and the visible emissions limit of 5% opacity are BACT.]

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT; and Air Construction Permit No. 0010087-031-AC]

O.8. Visible Emissions. The owner or operator shall demonstrate compliance with the visible emission limits annually, using the methods specified in this subsection (EPA Method 9). **On and after 09/09/13, the VE testing is in accordance with 40 CFR 63.1349(b)(2)**.

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

O.9. O&M Plan for Baghouses. The owner or operator shall adhere to the maintenance plan (O&M plan). The O&M plan addresses the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Northeast District office prior to expiration of this permit.

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

O.10. Common Condition J.0 – J.13.

O.11. Common Condition K.0. –K.4.

Subsection P. Specific Conditions

EU No.	Brief Description
-013	**Cement Load-Out Silos 6 & 7.** Emissions unit 013 shall have one emission point, the stack of the loadout at silos 6 and 7, designated by the applicant as 2Q14. Particulate matter emissions from this emissions unit shall be controlled by a baghouse.

Emissions unit 013 is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration and Rule 62-296.407, F.A.C., Portland Cement Plants.

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

EMISSION LIMITATIONS AND STANDARDS

P.1. Hours of Operation. These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]

P.2. Particulate Matter (PM) Emissions. Particulate matter emissions shall not exceed 0.01 grains/dscf. Particulate matter emissions shall be controlled by a baghouse. PM emissions for all emission points in this emission unit are limited to 0.22 lb/hr and 1.0 ton per year.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT and Air Construction Permit No. 0010087-031-AC]

P.3. PM_{10} Emissions. PM_{10} emissions shall not exceed 0.007 grains/dscf. PM_{10} emissions are limited to 0.15 lb/hr and 0.67 tons per year. The particulate weight emission standard and the visible emissions limit of 5% opacity are BACT.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT and Air Construction Permit No. 0010087-031-AC]

P.4. Visible Emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT and Air Construction Permit No. 0010087-031-AC; 10% opacity from 40 CFR 63.1345 is subsumed]

CONTINUOUS COMPLIANCE REQUIREMENTS

P.5.a. Continuous Opacity Compliance(Each EP): 2006 NESHAPS, **Prior to 09/08/13**, sources subject to a limitation on opacity under §63.1348, (2006 NESHAP) you must conduct required emissions monitoring in accordance with §63.1350 paragraphs (a)(4)(i)- (a)(4)(iv)Procedures to be used to periodically monitor affected sources subject to opacity standards under §§63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.

(i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

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

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

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

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph shall not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" shall mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points shall be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, the owner or operator of the Portland cement plant shall have the option to conduct a Method 22 visible emissions monitoring test according to the requirements of paragraphs (a)(4)(i) through (iv) of this section for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (a)(4)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (a)(4)(i) through (iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof and vent of the building for at least 1 minute. The test must be conducted under normal operating conditions.

P.5.b. <u>Continuous Opacity Compliance (Each EP)</u>: 2010 NESHAPS, **On and after 09/09/13,** sources subject to a limitation on opacity under §63.1345, you must conduct required emissions monitoring in accordance with the provisions of paragraphs (f)(1)(i) through (f)(1)(vii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with §63.1347. You must conduct emissions monitoring in accordance with paragraphs (f)(2)(i) through (f)(2)(iii) of §63.1350 and in accordance with the operation and maintenance plan developed in accordance with (p)(1) through (p)(4) of §63.1350. You must also develop an opacity emissions monitoring plan in accordance with paragraphs (o)(1) through (o)(4) and paragraph (o)(5), if applicable, of §63.1350.

(1)(i) You must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of appendix A–7 to part 60 of 40 CFR 60. The performance test must be conducted while the affected source is in operation.

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

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

(iv) If visible emissions are observed during any Method 22 performance test, of appendix A–7 to part 60 of this chapter, you must conduct five 6-minute averages of opacity in accordance with Method 9 of appendix A–4 to part 60 of this chapter. The Method 9 performance test, of appendix A–4 to part 60 of this chapter, must begin within 1 hour of any observation of visible emissions.

(v) The requirement to conduct Method 22 visible emissions monitoring under this paragraph do not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

(vi) If any partially enclosed or unenclosed conveying system transfer point is located in a building, you must have the option to conduct a Method 22 performance test, of appendix A–7 to part 60 of this chapter, according to the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section for each

P.5.b. continued:

such conveying system transfer point located within the building, or for the building itself, according to paragraph (f)(1)(vii) of this section.

(vii) If visible emissions from a building are monitored, the requirements of paragraphs (f)(1)(i) through (f)(1)(iv) of this section apply to the monitoring of the building, and you must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

(2) (Not applicable)

(3) *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under paragraphs (f)(1) or (f)(2) of this section, you must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in §63.1347.

[40 CFR 63.1350(f)(1)(i)- (vii), (f)(2), (f)(3); 40 CFR 60.64(b)(4)]

TESTING REQUIREMENTS

P.6. PM & PM10 Compliance Testing. Annual compliance testing for PM and PM_{10} emissions from these emission points is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

P.7. Visible Emissions. The owner or operator shall, for emissions unit 013, demonstrate compliance with the visible emission limits annually, using the methods specified in this subsection **on and after 09/09/2013**, in accordance with 40 CFR 63.1349(b)(2).

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

P.8. Common Condition J.0 – J.13.

P.9. Common Condition K.0. –K.4.

Subsection Q. Specific Conditions

EU No.	Brief Description
-014	**Coal Handling and Grinding Operations- Mill 2**

Emissions unit 014 is subject to 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants (40 CFR 60.250 – 60.254) and 40 CFR 60 Subpart A. These emissions units are also subject to the requirements of the state rules as indicated in this permit, particularly the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.

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

OPERATIONAL REQUIREMENTS

Q.1. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]

Q.2. Process Rate Limitation. The coal mill shall not crush more than 15.4 tons per hour, 30 day average rate of coal and/or petroleum coke. The coal mill shall not crush more than 134,769 tons annually. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); and Permit No. 0010087-031-AC]

Q.3. O&M Plan for Baghouses. The owner or operator shall adhere to the operation and maintenance plan (O&M Plan). The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Northeast District office prior to expiration of this permit.

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

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

Q.4. Emissions unit 014 shall have the following emission points:

EMISSION POINT	DESCRIPTION
2S17	Coal mill #2
2S21	Pulverized coal bin

Q.5. Particulate Matter (PM) Emissions. Particulate matter (PM) emissions from each emission point shall not exceed 0.01 grains/dscf (1.81 lbs/hr and 7.9 tpy). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); 40 CFR 60.252 and Permit No. 0010087-031-AC]

Q.6. <u>PM_{10} Emissions</u>. PM_{10} emissions shall not exceed 0.007 grains/dscf (1.27 lb/hr and 5.55 tpy). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); and Permit No. 0010087-031-AC]

Q.7. <u>Visible Emissions</u>. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); and Permit No. 0010087-031-AC; BACT is more stringent than 20% opacity from 40 CFR 60.254]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

Q.8. <u>Emission Tests Required</u>. The owner or operator shall demonstrate compliance with the visible emissions standard annually using EPA Method 9, as described in 40 CFR 60 Appendix A.

§ 60.257 Test methods and procedures.

(a) The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.

(1) Method 9 of appendix A–4 of this part and the procedures in §60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).

(i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).

(ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.

(2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.

(i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.

(ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.

(iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

Q.8. continued:

(3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.

(i) No more than three emissions points may be read concurrently.

(ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.

(iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

Q.9. PM Emissions Testing. For emission points 2S17 and 2S21, initial and annual compliance testing for PM emissions from this emission point is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

Should subsequent particulate matter (PM) testing be required for either emission point of emissions unit 014, compliance shall be demonstrated using EPA Method 5.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., BACT]

REPORTING AND RECORD KEEPING REQUIREMENTS

Q.10. Records of Process Rates. The owner or operator shall make and maintain records showing the monthly processing rate of coal and petroleum coke crushed in the coal mill. Records of the processing rate for each month shall be completed no later than 10 days following the end of the month.

[Rule 62-4.070(3), F.A.C., and Permit No. 0010087-031-AC]

Q.11. Common Condition J.0 – J.13.

Subsection R. Specific Conditions

Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ, - National Emissions Standards For Hazardous Air Pollutants For Stationary Reciprocating Internal Combustion Engines.

The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description
017	Three Emergency Engines Engine No. 1: Power unit for emergency electrical generator for Kiln No. 1, manufactured by Caterpillar. Engine No. 2: Power unit for emergency electrical generator for Kiln No. 2, manufactured by Caterpillar. Engine No. 3: Power unit for emergency, centrifugal-type fire pump, manufactured by Clarke Detroit Diesel-Allison, Inc.

Engine No. 1: Power unit for emergency electrical generator for Kiln No. 1, manufactured by Caterpillar.

R.1. <u>The following table provides important details for Engine No. 1</u>:

No.	Engine Brake HP	Date of Construction	Primary Fuel	Type of Engine	Serial #	Date of last modification or reconstruction
1	1108	1998	Diesel	Emergency	2WJ01811	N/A

40 CFR 63.6590(a)(1)(i) Existing stationary RICE at major source. 40 CFR 63.6590(b)(3)(iii) does not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements.

Engine No. 2: Power unit for emergency electrical generator for Kiln No. 2, manufactured by Caterpillar.

R.2. <u>The following table provides important details for Engine No. 2</u>:

No.	Engine Brake HP	Date of Construction	Primary Fuel	Type of Engine	Serial #	Date of last modification or reconstruction
2	1150	2007	Diesel	Emergency	MJE0 0417	N/A

R.2. continued:

40 CFR 63.6590(a)(2)(i) New stationary RICE at major source. 40 CFR 63.6590(b)(1)(i)- Stationary RICE subject to limited requirements, does not have to meet the requirements of this subpart and of subpart A of this part, except for initial notification requirements of 40 CFR 63.6645(f). This engine operates exclusively as an emergency stationary RICE.

Engine No. 3: Power unit for emergency, centrifugal-type fire pump, manufactured by Clarke Detroit Diesel-Allison, Inc.

R.3. The following table provides important details for Engine No. 3:

No.	Engine Brake HP	Date of Construction	Primary Fuel	Type of Engine	Serial #	Date of last modification or reconstruction
3	83	11/1/98	Diesel	Emergency	VMPP04 HT3431H	N/A

40 CFR 63.6590(a)(1)(i) Existing stationary RICE at major source.

An existing stationary CI RICE located at a major source of HAP emissions, you must comply with the applicable emission limitations and operating limitations no later than May 3, 2013.

GENERAL REQUIREMENTS

R.4. (a) You must be in compliance with the emission limitations and operating limitations in this subpart that apply to you at all times.

(b) At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605]

Engine No.3 continued:

R.5. Table 2c to Subpart ZZZZ of Part 63—Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions[1]:

a. Change oil and filter every 500 hours of operation or annually, whichever comes first;[2]
b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;
c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]

During periods of startup you must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]

[1]If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.
[2]Sources have the option to utilize an oil analysis program as described in §63.6625(i) in order to extend the specified oil change requirement in Table 2c of this subpart.
[3]Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[75 FR 51593, Aug. 20, 2010]

R.6. No testing is required as per Tables 3-5. In accordance with 40 CFR 63.6625(e)(2), the facility must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. 40 CFR 63.6625(f), the facility must install a non-resettable hour meter if one is not already installed. 40 CFR 63.6625(h), the facility must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. 40 CFR 63.6625(i), the facility has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c.

R.7. In accordance with 40 CFR 63.6635, the facility must:

(a) If you must comply with emission and operating limitations, you must monitor and collect data according to this section.
(b) Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, you must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
(c) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. You must, however, use all the valid data collected during all other periods.

No notification is required as per 40 CFR 63.6645(a)(5); §§63.7(b) and (c), 63.8(e), (f)(4) and (f)(6), 63.9(b) through (e), and (g) and (h).

Appendix NSPS, Subpart OOO.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.
Appendix U, List of Unregulated Emissions Units and/or Activities.

Referenced Attachments. ..... At End
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.