American Cement Company, LLC
Site Name

Facility ID No. 1190042
Sumter County

Initial Title V Air Operation Permit

Permit No. 1190042-007-AV

Permitting and Compliance Authority:

State of Florida
Department of Environmental Protection
Air Resource Management, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 632-7600
Fax: (813) 632-7668

Initial Title V Air Operation Permit

Permit No. 1190042-007-AV

Table of Contents

Section **Page Number**

I. Facility Information
- A. Facility Description. 2
- B. Summary of Emissions Units. 3
- C. Applicable Regulations. 4

II. Facility-wide Conditions. 5

III. Emissions Units and Conditions.
- A. EU No. 001 - Raw Material Quarrying, Crushing, and Storage 7
- B. EU No. 002 - Raw Materials Conveying, Storage, and Processing 12
- C. EU No. 003 - Pyroprocessing System 15
- D. EU No. 004 - Clinker and Additives Storage and Handling 35
- E. EU No. 005 - Finish Mill 38
- F. EU No. 006 - Cement Handling, Storage, Packing, and Loadout 41
- G. EU No. 007 - Coal and Petroleum Coke Grinding System 44
- H. EU No. 008 - Fugitive Dust from Storage Piles, Paved Roads, and Unpaved Roads 49
- I. Common Conditions for EU Nos. 002 through 007 51
- J. Common Conditions for EU Nos. 002 through 006 53

IV. Appendices (Index) 57

Appendix A, Glossary *
Appendix BD - Final BACT Determination and Emission Standards (dated 02/13/06)
Appendix CAM, Compliance Assurance Monitoring Plan
Appendix I, List of Insignificant Emissions Units and/or Activities *
Appendix ICE, Requirements for Internal Combustion Engines (for Emission Unit No. 009) *
Appendix NESHAP 40 CFR 63Subpart A (General Provisions for 40 CFR 63)
Appendix NESHAP 40 CFR 63 Subpart LLL (09/09/10 FR) (Emissions Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry)
Appendix NESHAP 40 CFR 63 Subpart LLL (12/20/06 FR)
Appendix NSPS 40 CFR 60 Subpart A (General Provisions for 40 CFR 60)
Appendix NSPS 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants)
Appendix NSPS 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants)
Appendix NSPS 40 CFR 60 Subpart OOO (Standards of Performance for Non-Metallic Mineral Processing Plants)
Appendix NSPS 40 CFR 60 Subpart IIII, Condition Set F (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines – Condition Set F – Owner/Operator 2007 and later model year, non-fire pump emergency, greater than or equal to 10L and less than 30L per cylinder)
Appendix RR, Facility-wide Reporting Requirements *
Appendix TR, Facility-wide Testing Requirements *
Appendix TV, Title V General Conditions *

V. Referenced Attachments (Index) 58

Statement of Basis
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 *

** These documents are included together in a Combined Appendices & Attachments electronic file.*

PROPOSED PERMIT

PERMITTEE:
American Cement Company, LLC
4750 E. CR 470, P.O. Box 445
Sumterville, Florida 33585

Permit No. 1190042-007-AV
Sumterville Cement Plant
Facility ID No. 1190042
Initial Title V Air Operation Permit

The purpose of this permit is for the initial Title V air operation permit for the above referenced facility. The Sumterville Cement Plant is located in Sumter County at 4750 E. CR 470, Sumterville, Florida. UTM Coordinates are: Zone 17, 399.80 East and 3181.90 North. Latitude is: 28° 45' 45.0" North; and, Longitude is: 82° 01' 35.0" West.

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:
Renewal Application Due Date: *225 days prior to expiration date*
Expiration Date: *5 years from effective date*

(PROPOSED)

_____

Cindy Zhang-Torres, P.E.
Air Permitting Manager
Southwest District

CZ/dz/pp

Subsection A. Facility Description

The facility will be a nominal 1,150,000 tons per year (TPY) dry process Portland cement plant incorporating a dry process kiln with a preheater and calciner (PH/C). The facility includes a surface limestone mine. The manufacture of Portland cement primarily involves the crushing, grinding, and blending of limestone, clays, and other raw materials into a chemically proportioned mixture which is heated in a rotary kiln to extremely high temperature to produce clinker nodules. The clinker is cooled and ground with a small quantity of gypsum to produce finished cement.

Major equipment associated with the main components of the plant includes the following:

- A materials storage building (MSB);
- A primary crusher at the quarry and belt conveyors to MSB;
- Raw material piles stored inside of the MSB. The piles will include limestone, alumina sources (e.g. bauxite, clay, and coal ash), iron sources (e.g. mill scale and iron ore), silica sources (e.g. sand), and additives (e.g. feldspar);
- Materials handling equipment including portal reclaimers, stackers, belt conveyors, conveyor from the MSB to the raw mill, control system/analyzer, etc.;
- An in-line raw mill that simultaneously dries raw materials using the exhaust gas from the kiln, PH/C, and clinker cooler;
- A preheater/calciner (PH/C) capable of burning coal, petroleum coke, new No. 2 oil, on-specification used oil, and natural gas; with staged combustion and selective non-catalytic reduction (SNCR) system;
- An air heater, capable of firing No. 2 or No. 4 fuel oil, on-specification used fuel oil or natural gas, for use when additional drying capacity is required;
- A nominal 10,000 ton homogenizing (blending) silo;
- A nominal 18 TPH coal and petroleum coke grinding system with associated mill, storage facility, conveyors, including a fabric filter baghouse;
- A dry process preheater/calciner (PH/C) kiln capable of producing 3,000 tons per day of clinker;
- An indirect-firing system with a low-NO_X main kiln burner capable of burning coal, petroleum coke, new No. 2 fuel oil, on-specification used oil, and natural gas;
- A whole tire kiln feeder system;
- A clinker cooler with reciprocating grates, cooling air fans, and hot air ducting to the kiln and PH/C;
- Clinker storage and grinding including a finish mill with air separator, clinker silos with metering device, limestone and gypsum piles, and associated conveyors; and
- A cement transfer and storage facility including truck loadout and packhouse.

The facility uses pulverized coal, petroleum coke, whole scrap tires, No. 2 fuel oil, and on-specification used oil as fuel sources for the calciner/kiln system. The primary calciner/kiln operating fuel is pulverized coal. The air heater is fired with natural gas, No. 2 or No. 4 fuel oil, and on-specification used oil.

Nitrogen oxides (NOx) emissions are minimized by indirect firing in a low-NOx main kiln burner, and staged combustion and a selective non-catalytic reduction (SNCR) ammonia injection system in the preheater/calciner. Sulfur dioxide (SO_2) emissions are controlled by the use of inherently low sulfur raw materials and scrubbing by finely divided lime in the calciner. Carbon monoxide (CO) and volatile organic compound (VOC) emissions are controlled by promoting complete combustion in the kiln and calciner, and minimizing carbon and oily content of raw materials. Particulate matter (PM/PM_{10}) from the PH/C, kiln, in-line raw mill, and clinker cooler are controlled by a single large fabric filter main baghouse. Numerous other baghouses are included to control PM/PM_{10} emissions from materials conveyance, transfer, grinding, and handling. Fugitive PM/PM_{10} emissions

from raw material piles, loading operations, transportation, etc. are controlled by reasonable precautions including paving, road sweeping, watering, planting grass, etc.

This plant is subject to the maximum achievable control technology (MACT) requirements in 40 CFR 63 Subpart LLL – National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. In addition, the plant is subject to the Department's determination of best available control technology (BACT) for NOx, CO, SO_2, VOC and PM/PM_{10} and the associated BACT emission limitations for each of these air pollutants. *(See Appendix BD - Final BACT Determination and Emission Standards.)*

This facility includes continuous emissions monitoring systems (CEMS) for NOx, CO, SO_2, total hydrocarbons (THC)/VOC, opacity, and mercury (Hg) on the PH/C kiln, in-line raw mill, and clinker cooler fabric filter baghouse exhaust stack.

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

Subsection B. Summary of Emissions Units

EU No.	Brief Description
Regulated Emissions Units	
001	Raw Material Quarrying, Crushing, and Storage (includes raw material processing from quarry up to raw material storage, and additives handling from delivery to storage)
002	Raw Materials Conveying, Storage, and Processing (from raw material and additive storage to preheater - includes conveyance of raw materials and raw meal to and from raw mill, and homogenizing (blending) silo)
003	Pyroprocessing System (includes kiln, preheater/calciner, raw mill, air heater, and clinker cooler)
004	Clinker and Additives Storage and Handling (includes clinker handling from clinker cooler to clinker silo discharge, and clinker and additive handling from storage to the finish mill)
005	Finish Mill (Clinker Grinding)
006	Cement Handling, Storage, Packing, and Loadout (includes cement conveyance to silos, cement silos, loadout to trucks from silos, and cement bagging operations)
007	Coal and Petroleum Coke Grinding System (includes coal/petroleum coke handling from railcar unloading to the pulverized fuel bin)
008	Fugitive Dust From Storage Piles, Paved Roads, and Unpaved Roads
009	Stationary Emergency Generator Combustion Ignition (CI) Reciprocating Internal Combustion Engine (RICE) *(See Appendix ICE)*

Subsection C. Applicable Regulations

Based on the initial Title V air operation permit application received August 11, 2010, this facility is a major source of hazardous air pollutants (HAP).

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.

Federal Regulations *	**EU No(s).**
40 CFR 60, NSPS Subpart A - General Provisions for 40 CFR 60	001 through 007, 009
40 CFR 60, NSPS Subpart F - Standards of Performance for Portland Cement Plants	002 through 006
40 CFR 60, NSPS Subpart Y - Standards of Performance for Coal Preparation Plants	007
40 CFR 60, NSPS Subpart OOO - Standards of Performance for Non-Metallic Mineral Processing Plants	001
40 CFR 60, NSPS Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	009
40 CFR 63, NESHAP Subpart A - General Provisions for 40 CFR 63	002 through 007
40 CFR 63, NESHAP Subpart LLL - National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry - Major Sources[1]	002 through 007
State Regulations	**EU Nos.**
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All
Rule 62-296.212.400(10), Control Technology Review, F.A.C. (Best Available Control Technology (BACT) Determination)	All
Rule 62-296.407, Portland Cement Plants, F.A.C.	003

* The provisions of these federal regulations are included as a part of this permit in the attached appendices.

[1] NESHAP Subpart LLL Applicability Note - Unless otherwise noted in this permit, the applicable version of NESHAP Subpart LLL is 40 CFR 63 Subpart LLL as amended in the September 9, 2010 Federal Register (09/09/10 FR), included in this permit as Appendix NESHAP 40 CFR 63 Subpart LLL (09/09/10 FR). For Emissions Unit (EU) No. 003 (Pyroprocessing System) for certain emission limitations (for pollutants PM, mercury, THC and HCl) and associated compliance requirements, the applicable version of NESHAP Subpart LLL until September 9, 2013 is 40 CFR 63 Subpart LLL as amended in the December 20, 2006 Federal Register (12/20/06 FR), included in this permit as Appendix NESHAP 40 CFR 63 Subpart LLL (12/20/06 FR). See the Emissions Unit Specific Conditions Subsection for EU No. 003 (Section III., Subsection C.) for specifics on this.

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.]

(Permitting Note - Nothing is deemed necessary and ordered at this time.)

FW4. General Visible Emissions (VE) - 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.]

Annual Reports and Fees

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

FW5. Annual Operating Report (AOR) - 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. *(Permitting Note – See also APPENDIX RR Item RR5 for more AOR information.)*
[Rule 62-210.370(3), F.A.C.]

FW6. 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. *(Permitting Note – See also APPENDIX RR Item RR6. for more Title V emissions fee information.)*
[Rule 62-213.205, F.A.C.]

FW7. 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. *(Permitting Note – See also APPENDIX RR Item RR7. for more annual statement of compliance information.)*
[Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW8. 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]

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
001	Raw Material Quarrying, Crushing, and Storage

This emissions unit consists of raw material processing from quarry up to raw material storage, and additives handling from delivery to storage. Equipment includes a primary crusher at the quarry, and two raw materials storage buildings (MSB). Covered belt conveyors (Belts BO-3, BO-2 and BO-1) convey the crushed limestone between the crusher and the MSB. Raw material piles created via a Tripper Belt and stored inside of the MSB include limestone, alumina sources (e.g. bauxite, clay and coal ash), iron sources (e.g. mill scale and iron ore), silica sources (e.g. sand), and additives (e.g. feldspar). Other materials handling equipment includes portal reclaimers, stackers, hoppers, belt conveyors, a conveyor from the MSB to the raw mill, and a control system/analyzer.

Raw material quarrying, crushing, and storage contains the following emissions points.

- Primary crusher and all belt conveyors (Belts BO-3, BO-2 and BO-1) and belt conveyor transfer points to raw material storage building (Crusher to Belt BO-3; Belt BO-3 to Belt BO-2; Belt BO-2 to Belt BO-1; Belt BO-1 to Tripper Belt (inside the MSB); Tripper Belt to Limestone Pile (inside MSB).

- All conveyors and hoppers associated with additives handling and storage.

PSD BACT Determinations - A determination of the Best Available Control Technology (BACT) was made for particulate matter (PM/PM_{10}). To satisfy the BACT requirements for this emission unit the visible emissions limits act as surrogate standards for PM.
[Rule 62-212.400 (Prevention of Significant Deterioration (PSD)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

Federal New Source Performance Standards (NSPS) Requirements - This emissions unit is subject to 40 CFR 60, Subpart A (General Provisions) and 40 CFR 60, Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants)*, adopted by reference in Rule 62-204.800(8)(b), F.A.C. *(see Specific Condition No. A.10.).* The Department determines that the BACT emissions performance requirements are as stringent as or more stringent than the limits imposed by the applicable NSPS provisions*. Some separate reporting and monitoring may be required by the individual subpart.
[Rule 62-204.800(8), F.A.C.; 40 CFR 60 Subpart OOO; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Subpart OOO Applicability Note - Construction of the various components of this emission unit were commenced on or before October 18, 2007, which is before the April 28, 2008 trigger date contained in Subpart OOO for the applicability of some requirements. Any affected equipment that commences construction, modification or reconstruction after April 22, 2008 may be subject to more stringent Subpart OOO requirements.)*

Essential Potential to Emit (PTE) Parameters

A.1. Hours of Operation - This emissions unit is permitted to operate continuously (i.e., 8,760 hours per year). [Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

A.2. Process Rate Limitations - The crusher may process up to 750 tons (dry basis) per hour of raw materials on a monthly average basis. No more than 1,482,000 tons (dry basis) of raw materials shall be processed during any consecutive 12 month period. *(See Specific Condition No. A.9. for recordkeeping requirements associated with these process rate limitations.)* [Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Permitting Note - For emissions unit operating rate limitation after testing, see the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.])

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Unless otherwise specified, the averaging time for Specific Condition A.3. is based on the specified averaging time of the applicable test method.

A.3. Visible Emission Standards - Visible emissions (VE) shall not exceed the following limits. These visible emissions standards do not apply to truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher *(see NSPS Subpart OOO 40 CFR 60.672(d))*.

a. Fugitive emissions from the crusher shall not exceed 15% opacity*.

b. Fugitive emissions from any transfer point on belt conveyors or from any other affected facility shall not exceed 10% opacity. This visible emissions limit is applicable to the following transfer points*.

1. Crusher to Conveyor Belt BO-3
2. Conveyor Belt BO-3 to Conveyor Belt BO-2
3. Conveyor Belt BO-2 to Conveyor Belt BO-1
4. Conveyor Belt BO-1 to Tripper Belt (inside the Material Storage Building (MSB)*
5. Tripper Belt to Limestone Storage Pile (inside the Material Storage Building (MSB)*

*(*MSB Transfer Points Permitting Note - The transfer points for Conveyor Belt BO-1 to the tripper, and the tripper to the limestone pile are both inside raw material storage building(s) and covered by the optional building openings visible emissions limitation in c. below.)*

*(*NSPS Subpart OOO Note – The BACT Determination VE opacity limits in a. and b. above are identical to the applicable NSPS Subpart OOO Table 3 VE limits.)*

[Appendix BD - Final BACT Determination and Emission Standards; NSPS Subpart OOO 40 CFR 60.672(b) and Table 3 to Subpart OOO]

c. As an option to complying with b. above, any transfer points enclosed in a building may instead comply with an emission limitation on the building that fugitive emissions from building openings must not exceed 7% opacity. (This visible emissions limit option is applicable to the transfer points inside the two (2) material storage buildings (MSB) (i.e., transfer points b.4 and b.5. above). [NSPS Subpart OOO 40 CFR 60.672((e)]

[Rules 62-204.800(8), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NSPS Subpart OOO 40 CFR 60.672; Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Test Methods and Procedures

(Permitting Note - The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

A.4. Test Methods - Required compliance tests shall be performed in accordance with the following reference method:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources (for VE opacity compliance tests)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-297.401, and 62-204.800(8) F.A.C.; NSPS Subpart OOO 40 CFR 60.675; Construction Permit 1190042-001-AC (PSD-FL-361)]

A.5. Annual Visible Emissions (VE) Compliance Testing - In order to document compliance with the visible emissions limitations of Specific Condition No. A.3., the following emission sources shall each be tested for visible emissions during each federal fiscal year (October 1st to September 30th):

a. the crusher;

b. the conveyor belt transfer points listed in Specific Condition No. A.3.b.; and

c. the raw material storage buildings openings (if the building is in use transferring and storing material)

[Rule 62-297.310(7), F.A.C.; partially established in Construction Permit 1190042-001-AC (PSD-FL-361)]

A.6. Testing Requirements - Unless otherwise specified, compliance tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit, as well as the applicable NSPS provisions of NSPS Subpart OOO 40 CFR 60.675.
[Rule 62-297.310, F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Reporting and Recordkeeping Requirements

A.7. Compliance Test Reports - For each compliance test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. *(See Condition TR8. in Appendix TR, Facility-Wide Testing Requirements for additional test report requirements.)*
[Rule 62-297.310(8), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

A.8. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

A.9. Crusher Process Rate Records - In order to document compliance with the crusher process rate limitations of Specific Condition No. A.2., the permittee shall maintain the following records of the monthly crusher processing rate:

a. the month of the record;

b. the crusher processing rate (tons dry basis) for each month (tons (dry basis) per month); and

c. the total tons (dry basis) processed through the crusher in the most recent 12 consecutive month period (tons (dry basis) per 12 consecutive month period).

The above reports shall be recorded and available for inspection no later than 10 days following the end of the month.
[Rules 62-4.070(3) and 62-213.440(1)(b), F.A.C.; basis established in Construction Permit 1190042-001-AC (PSD-FL-361)]

Other Requirements

A.10. Federal Rule Requirements - In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in Federal New Source Performance Standard (NSPS) 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants), and Subpart A (General Provisions to 40 CFR 60), which are attached to and made a part of this permit in Appendix NSPS 40 CFR 60 Subpart OOO and Appendix NSPS 40 CFR 60 Subpart A. The applicable requirements are shown below. Some of these requirements have also been included in the Specific Conditions above (*Specific Conditions A.3 and A.4.)*.

NSPS 40 CFR 60 Subpart OOO Applicable Provision References *

*(Note - **Entire section** applies unless otherwise noted with specific applicable subsection references shown below the section caption.)*

40 CFR Section

§ 60.670 Applicability and designation of affected facility.
(a), (b), (e) and (f)

§ 60.671 Definitions.

§ 60.672 Standard for particulate matter (PM).
(a), (b) & (d) through (f)

§ 60.673 Reconstruction.

§ 60.675 Test methods and procedures.
(a) through (e) & (g)

§ 60.676 Reporting and recordkeeping.
(f) through (k)

Table 1 to Subpart OOO—Exceptions to Applicability of **Subpart A** to Subpart OOO

A.10 *(continued)*

Table 3 to Subpart OOO—Fugitive Emission Limits

(Subpart OOO Applicability Note - The above applicability references are based upon current operations as reflected in the initial Title V permit renewal application dated August 9, 2010 and subsequent request for additional information response letter dated January 4, 2011. The equipment/operations in this EU* ***are subject to NSPS Subpart OOO as units constructed on or before April 28, 2008****. Any change in operations or modification of equipment may change the applicable provisions.)*

[Rules Rule 62-204.800(8) and 62-213.440, F.A.C.; NSPS 40 CFR 60 Subpart OOO; Construction Permit 1190042-001-AC (PSD-FL-361)]

Subsection B. Emissions Unit (EU) No. 002 - Raw Materials Conveying, Storage, and Processing

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
002	Raw Materials Conveying, Storage, and Processing

This emissions unit consists of raw material and additive storage to preheater (includes conveyance of raw materials and raw meal to and from raw mill, and homogenizing silo. Equipment will include one homogenizing silo (nominal 10,000 ton capacity), and the associated transport system.

The following emissions points (EP) in the raw materials conveying, storage, and processing system are controlled by fabric filter baghouses*:

Baghouse /EP ID	Emissions Point (EP) Description	Baghouse Description
F-10	Raw meal transfer at air lift to homogenizing silo	CAMCORP Model 4TR8x16 baghouse with design exhaust air flow rate of 1,000 acfm
G-07	Raw meal transfer to homogenizing silo	CAMCORP Model 15TR12x225 baghouse with design exhaust air flow rate of 22,000 acfm
G-10	Homogenizing silo bin vent	CAMCORP Model 7TR12x49 baghouse with design exhaust air flow rate of 3,000 acfm
E-38	Filter dust surge bin	CAMCORP Model 8TR12x64 baghouse with design exhaust air flow rate of 6,000 acfm
H-08	Raw meal transfer from homogenizing silo	CAMCORP Model 4TR8x16 baghouse with design exhaust air flow rate of 1,000 acfm

(Baghouse/EP Note - The construction permit for this facility (1190042-001-AC (PSD-FL-361)) also included Baghouse/EP ID F-03 (Dust collector for raw meal transfer from raw grinding mill) which was not constructed and is not included in this operation permit.)*

***IMPORTANT Permitting Note** - See also **Subsections I and J** of this permit for Applicable Standards and Regulations, Notes, and Specific Conditions common to this and other emissions units.*

Control Technology

B.1. Baghouse Controls - Each emissions point (EP) identified above for the raw material conveying, storage and processing operations shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains/dscf and a PM_{10} design specification of 0.007 grains/dscf.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The baghouses associated with this emissions unit (see table above), are not subject to the requirements of 40 CFR 64 (Compliance Assurance Monitoring (CAM) because there are no applicable particulate matter emission limitations for this emissions unit.)*

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Unless otherwise specified, the averaging time for Specific Condition B.2. is based on the specified averaging time of the applicable test method.

B.2. Visible Emissions (VE) Limitations - Visible emissions (VE) shall not exceed the following limits.

a. Visible emissions are limited to 5% opacity from each of the emissions points (EP) shown in the EP table above and controlled by a baghouse*.

b. Visible emissions are limited to 10% opacity from any other emissions point associated with this emissions unit and not controlled by a baghouse.

(Permitting Note - The baghouses are designed to control PM emissions to 0.01 grains/dry standard cubic foot (gr/dscf) and PM_{10} emissions to 0.007 gr/dscf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 10.5 TPY. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the 10% opacity VE limitations given in NSPS 40 CFR 60 Subpart F or NESHAP 40 CFR 63 Subpart LLL. [Construction Permit 1190042-001-AC (PSD-FL-361)])*

[Rules 62-204.800(8) and (11), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NSPS Subpart F 40 CFR 60.62(c); NESHAP Subpart LLL 40 CFR 63.1345; Construction Permit 1190042-001-AC (PSD-FL-361)]

Monitoring of Operations

B.3. Periodic Monitoring Requirements - Each affected emissions point (EP) subject to an opacity standard shall be periodically monitored using the procedures described in 40 CFR 63.1350(f) to ensure compliance with the requirements of Specific Condition Nos. B.1. and B.2.
[Rules 62-4.070(3) and 62-204.800(11), F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f); Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Test Methods and Procedures

(Permitting Note - The attached Table 2, 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.4. Test Methods - Required compliance tests or periodic monitoring shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources (for VE opacity compliance tests)
22	Visual Determination of Fugitive Emissions From Material Sources (for opacity periodic monitoring)

B.4. *(continued)*

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-297.401, and 62-204.800(11) F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f)(1); Construction Permit 1190042-001-AC (PSD-FL-361)]

B.5. Annual Visible Emissions (VE) Compliance Tests Required – In order to demonstrate compliance with the visible emission standards of Specific Condition No. B.2.a., the baghouse exhaust vents for the mission points (EP) shown in the EP table above shall each be tested for visible emissions during each federal fiscal year (October 1st to September 30th).
[Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
003	Pyroprocessing System (includes kiln, preheater/calciner, raw mill, air heater, and clinker cooler)

The Pyroprocessing System includes the kiln, preheater/calciner (PH/C), raw mill, air heater, and clinker cooler. It consists of a dry process preheater/calciner rotary kiln with in-line raw mill that simultaneously dries raw materials using the exhaust gas from the kiln, preheater/calciner, or clinker cooler. The preheater includes a staged combustion calciner. The indirect-fired kiln, designed to process approximately 208 tons per hour of dry preheater feed material (including baghouse dust recirculation), is equipped with a low-NO_X main kiln burner. The calciner burners and main kiln burner are capable of burning pulverized coal (primary fuel), petroleum coke, natural gas, on-specification used oil, and No. 2 fuel oil. A kiln tire feed mechanism with an airlock/gate system is capable of feeding tire derived fuel (TDF) into the area just prior to the kiln exhaust. Other equipment includes an air heater (with a design maximum heat input rate of 36 MMBtu per hour) for use when additional material drying capacity is required, and a clinker cooler with reciprocating grates, cooling air fans, and hot air ducting to the kiln, preheater/calciner, or in-line raw mill. The air heater is capable of firing natural gas, No. 2 or No. 4 fuel oil, and on-specification used oil.

All emissions from the pyroprocessing system are directed to a single 12.8 diameter main exhaust stack with a stack height of 349 feet.

Emission Controls

Particulate Matter (PM/PM_{10}) Emission Controls -

PM/PM_{10} emissions from the pyroprocessing system are controlled by the following fabric filter main baghouse.

Baghouse/ EP ID	Emissions Point (EP) Description	Baghouse Description
E-19 *(Main Baghouse)*	Pyroprocessing System (Preheater/calciner, kiln, clinker cooler, raw mill, air heater)	high temperature Main Baghouse with design exhaust air flow rate of 409,650 acfm exhausting out the 349 foot tall Main Stack

Nitrogen Oxides (NO_X) Controls

- Low-NO_X Burners and Indirect Firing - The main kiln is equipped with a low NO_X burner that creates distinct combustion zones within the flame. An indirect firing system is used to reduce the amount of primary air injected with the fuel used in the main kiln burner.
- Staged Combustion in the Calciner (SCC) - The preheater/calciner (PH/C) system is designed such that the introduction of fuel, air and meal to the calciner are staged or sequenced for the reduction of NO_X emissions.
- SNCR in the Calciner - A selective non-catalytic reduction (SNCR) system is operated to achieve the permitted levels for NO_X emissions from the pyroprocessing system. The SNCR system consists of an aqueous ammonia tank, pumps, piping, compressed air delivery, injectors, control system, and other ancillary equipment. Aqueous ammonia is injected at a location(s) in the calciner with an appropriate temperature profile to support the SNCR process.

Sulfur Dioxide (SO_2) Emission Controls

The use of low-sulfur raw materials will help to keep SO_2 emissions from the pyroprocessing system below permitted levels, as will scrubbing by finely divided lime in the calciner and the natural scrubbing action of the limestone raw material in the kiln.

Applicable Standards and Regulations Notes

Rule 62-296.407, Portland Cement Plants, F.A.C. - This rule applies to the kiln and clinker cooler as "New Emission Units". The kiln and the clinker cooler are part of the pyroprocessing system, and the particulate matter (PM/PM_{10}) emission limits in this permit for the pyroprocessing system are as stringent or more stringent than the particulate matter limits in this rule.

PSD BACT Determinations - A determination of the Best Available Control Technology (BACT) was made for particulate matter (PM/PM_{10}), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur dioxide (SO_2) and volatile organic compounds (VOC) for this emissions unit.
[Rule 62-212.400 (Prevention of Significant Deterioration (PSD)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

Federal NESHAP Requirements - These emission units are subject to 40 CFR 63 Subpart A (General Provisions) and 40 CFR 63 Subpart LLL (National Emissions Standard for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry), as amended in the September 9, 2010 Federal Register (09/09/10 FR) and effective on November 8, 2010, as "existing" sources*. However, Subpart LLL 63.1351(b) (09/09/10 FR) states that "The compliance date for existing sources with the PM, mercury, THC, and HCl emissions limits in §63.1343(b) which became effective on November 8, 2010 will be September 9, 2013." That means that the permittee does not have to show compliance with the Subpart LLL (09/09/10 FR) emission limits (and the associated compliance, monitoring, recordkeeping and reporting requirements) for these pollutants until September 9, 2013. Until that time any emission limitations, and associated requirements, for these pollutants from the previous version of Subpart LLL (Subpart LLL as amended in the December 20, 2006 Federal Register (12/20/06 FR)) are still applicable. As the previous version of Subpart LLL did not include any emission limitations for hydrochloric acid (HCl), this only affects three pollutants, particulate matter (PM), total hydrocarbons (THC) and mercury (Hg). In Subpart LLL (09/09/10 FR), the THC limit was increased for both new and existing kilns so this limit is included in this permit. The limits for PM and Hg were revised, so this permit includes two sets of Subpart LLL requirements for these pollutants, one set that is applicable from the effective date of this permit until September 8, 2013, and another that is applicable from September 9, 2013 and after. In the initial construction permit for this facility the Department determined that the BACT emissions performance requirements of this permit were as stringent as or more stringent than the limits imposed by the applicable provisions of 40 CFR 63 Subpart LLL as promulgated at that time (Initial Construction Permit 1190042-001-AC (PSD-FL-361) was issued Final on February 13, 2006). Some separate reporting and monitoring may be required by the individual subpart.
[Rule 62-204.800(11), F.A.C.; NESHAP 40 CFR 63 Subpart LLL (12/20/06 FR and 09/09/10 FR); Construction Permit 1190042-001-AC (PSD-FL-361)]

> *(* NESHAP Subpart LLL Applicability Note - Construction of the components of this Portland cement manufacturing plant was commenced on or before July 9, 2007, which is before the May 6, 2009 trigger date contained in Subpart LLL (09/09/10 FR) for the applicability of some requirements for "new" sources. This facility is thus considered an "existing" source for the purposes of the applicability this subpart's requirements. In accordance with 40 CFR 63.1351(b) some requirements of Subpart LLL (09/09/10 FR) have a final compliance date of September 9, 2013.)*

Federal New Source Performance Standards (NSPS) Requirements - This emissions unit are subject to 40 CFR 60 Subpart A (General Provisions) and 40 CFR 60 Subpart F (Standards of Performance for Portland Cement PLANTS)*. The Department determined that the BACT emissions performance requirements of this permit are as stringent as or more stringent than the imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subpart.
[Rule 62-204.800(8), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(NSPS Subpart F Applicability Note - Construction of the components of this Portland cement manufacturing plant was commenced on or before July 9, 2007, which is before the June 16, 2008 trigger date contained in Subpart F for the applicability of some requirements.)*

***IMPORTANT Permitting Note** - See also **Subsections I and J** of this permit for Applicable Standards and Regulations, Notes, and Specific Conditions common to this and other emissions units.*

SPECIFIC CONDITIONS –

Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation - This emissions unit is permitted to operate continuously (i.e., 8,760 hours per year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.2. Process Rate Limitations - The clinker production rate of the kiln shall not exceed 125 tons per hour (24-hour rolling average) and 1,095,000 tons during any consecutive 12 month period. Kiln preheater feed rate shall be monitored and recorded for purposes of determining clinker production. The clinker production rate shall be determined using kiln feed and kiln feed loss on ignition (LOI) factors. The feed rates and kiln feed LOI shall be based on a 30 operating-day block average of daily measurements. For purposes of this requirement, an operating day is any day that the kiln produces clinker or burns fuel.
(See Recordkeeping and Reporting Requirements specific conditions for recordkeeping requirements associated with these process rate limitations.)
[Rules 62-4.070(3), and Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Permitting Note - For emissions unit operating rate limitation after testing, see the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.])

C.3. Authorized Fuels for Pyroprocessing System Kiln and Calciner - Only the following authorized fuels shall be fired in the pyroprocessing system kiln and calciner:

a. coal;

b. petroleum coke;

c. whole or chipped tires;

d. natural gas,;

e. No. 2 fuel oil; and/or

f. on-specification used fuel oil.

[Rules 62-4.070(3) and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.4. Authorized Fuels for Pyroprocessing System Air Heater - The air heater shall fire only the following fuels:

a. natural gas;

b. on-specification used oil; or

c. No. 2 or No. 4 fuel oil.

[Rules 62-4.070(3) and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361), as amended by Construction Permit 1190042-003-AC (PSD-FL-361B)]

C.5. Prohibited Fuels and Materials - The owner or operator shall **not** introduce into any part of the process any of the following fuels and materials:

a. hazardous wastes;

b. petroleum contaminated soil or materials;

c. off-specification used oil;

d. solid fuels other than those allowed by this permit; or

e. solid wastes, other than tires as allowed by this permit.

[Rules 62-4.070(3), and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.6. Maximum Heat Input Rate to Pyroprocessing System - Kiln and Calciner - The maximum total heat input rate to the pyroprocessing system kiln and calciner (combined) shall not exceed 9,600 MMBtu per day (based on a nominal rate of 400 MMBtu/hr).
[Rules 62-4.070(3) and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.7. Tire Derived Fuel (TDF) Usage Limitations and Requirements - The use of whole or chipped tire derived fuel (TDF) in the pyroprocessing system is limited by the following requirements.

a. The maximum heat input rate from firing TDF shall not exceed 15% of the total pyroprocessing system kiln and calciner heat input rate (the remaining 85% of the total pyroprocessing heat input rate shall be from the firing of other authorized fuels); and

b. shall not exceed 60 MMBtu per hour.

c. TDF shall be directly fed into the kiln system at the transition section between the base of the calciner and the point where gases exit the kiln. The tire feed mechanism shall be designed with an airlock/gate system.

d. Tires shall be stored, handled and managed in accordance with the provisions of Chapter 62-711, F.A.C.

(See Recordkeeping and Reporting Requirements specific conditions for recordkeeping requirements associated with the limitations of a. and b. above.)

[Rules 62-4.070(3) and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.8. On Specification Used Oil Fuel Usage Limitations - The firing of "on-specification" used oil fuel shall not exceed the following:

a. 1,000 gallons per hour (kiln and calciner combined); and

b. 1,500,000 gallons during any consecutive 12 month period (kiln, calciner and raw mill air heater combined).

(See Recordkeeping and Reporting specific conditions for recordkeeping requirements associated with the limitations of a. and b. above.)

[Rules 62-4.070(3) and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361), as amended by Construction Permit 1190042-003-AC (PSD-FL-361B)]

C.9. On Specification Used Oil Fuel Requirements - "On-Specification" used oil fuel shall meet the following specifications:

a. Arsenic shall not exceed 5.0 ppm;

b. Cadmium shall not exceed 2.0 ppm;

c. Chromium shall not exceed 10.0 ppm;

d. Lead shall not exceed 100.0 ppm;

e. Total halogens shall not exceed 1000 ppm; and

f. Flash point shall not be less than 100° F.

Used oil fired as a fuel may be generated from on site sources or purchased from a vendor. Used oil shall not contain any PCB's.

[Rule 62-4.070(3), F.A.C.; 40 CFR 279.61; 40 CFR 761.20(e); Construction Permit 1190042-001-AC (PSD-FL-361)]

C.10. Cement Kiln Dust Handling Requirements - Cement kiln dust (CKD) shall be re-circulated in the process and shall not be directly discharged from process or emission control equipment. 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.
[Rules 62-4.070(3), and 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.11. Emissions Unit Operating Rate Limitation After Testing - See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

C.12. Emissions Standards - Emissions from the pyroprocessing system (including the air heater) main stack shall not exceed the following emissions standards shown in the following table. Unless otherwise noted, emission limitations apply during all periods of operation (including startup, shutdown and malfunction).

(See next page for emission limitations table.)

C.12. *(continued)*

Pollutant	Emission Limit	Averaging Time	Compliance Method	Basis
Carbon Monoxide (CO)	2.9 lb/ton of clinker	30-day rolling	CEMS	BACT
	362.5 lb/hr			
Nitrogen Oxides (NO_X)	1.95 lb/ton of clinker	30-day rolling	CEMS	BACT
	243.8 lb/hr			
Sulfur Dioxide (SO_2)	0.20 lb/ton of clinker	24-hr rolling	CEMS	BACT
	25.0 lb/hr			
Volatile Organic Compounds (VOC) [a]	0.12 lb/ton of clinker	30-day block	CEMS	BACT
	15.0 lb/hr			
Total Hydro-carbons (THC)	24 ppmvd[d] (as propane) @7% O_2* (*no O_2 correction during startup & shutdown)	30-day rolling (7-day rolling for startup& shutdown)	CEMS	NESHAP Subpart LLL (09/09/10 FR)
Particulate Matter (PM/PM_{10}) [b]	0.153 lb/ton of clinker	Three 1-hr runs (CEMS 3 hour average on and after 09/09/13)	3-Run Stack Test (PM CEMS on and after 09/09/13)	BACT
	19.13 lb/hr			
	10 % opacity	6-minute block	COMS	BACT
	0.30 lb/ton kiln feed (dry basis) (effective until 09/08/13[e])	Three 1-hr runs	3-Run Stack Test	NESHAP Subpart LLL (12/20/06 FR) [e]
	Normal operation: 0.04 lb/ton clinker	30-day rolling	PM CEMS	NESHAP Subpart LLL (09/09/10 FR) [f]
	Startup and Shutdown: 0.004 gr/dscf	7-day rolling		
Dioxins/ Furans (D/F) [c]	0.20 ng/dscm (TEQ) @ 7% O_2	Three 3-hr runs	3-Run Test & Temperature Monitor	NESHAP Subpart LLL [c]
	0.40 ng/dscm (TEQ) @ 7% O_2			
Mercury (Hg)	122 lb/12-month period	12-month rolling	CEMS	Avoid PSD
	41 ug/dscm	Three 1-hr runs (30-day rolling)	3-run Stack test (or CEMS)	NESHAP Subpart LLL (12/20/06 FR) [e]
	Normal operation: 55 lb/MM tons clinker	30-day rolling	CEMS	NESHAP Subpart LLL (09/09/10 FR) [f]
	Startup and Shutdown: 10 ug/dscm	7-day rolling		
Hydrochloric Acid (HCl)	3 ppmvd @ 7% O_2* (*no O_2 correction during startup & shutdown)	30-day rolling (7-day rolling for startup &shutdown)	CEMS	NESHAP Subpart LLL (09/09/10 FR) [f]

C.12. *(continued)*

Emission Limitation Table Notes -

a. Compliance shall be demonstrated by THC CEMS. VOC emissions shall be measured as total hydrocarbons (THC) and expressed as "propane" for the mass emissions rate.

b. All PM emitted from the baghouse exhaust is assumed to be PM_{10}. The BACT standard for PM is equivalent to approximately 0.09 lb per ton of preheater feed material. The emissions limits for particulate matter and visible emissions imposed by Rule 62-212.400 (BACT) are as stringent as or more stringent than the limits imposed by the applicable NESHAP provisions of NESHAP Subpart LLL, as amended in the 12/20/06 Federal Register. *(Subpart LLL Note – The BACT PM/PM10 limits are less stringent than the PM limits in Subpart LLL as amended in the 09/09/10 Federal Register. These more stringent Subpart LLL PM limits have a final compliance date of 09/09/13.)* The BACT requirements do not waive or vary any applicable NESHAP monitoring or record keeping requirements.

c. Dioxin/furans shall not exceed 0.20 ng/dscm (TEQ) @ 7% oxygen when the average of the performance test run temperatures at the inlet to the particulate matter control device is 204° C (400° F) or more and shall not exceed 0.40 ng/dscm (TEQ) @ 7% oxygen when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204° C (400° F) or less. *(Subpart LLL Note - The D/F limits are the same in Subpart LLL as amended in the 12/20/06 and 09/09/10 Federal Registers.)*

d. Construction permit 1190042-001-AC (PSD-FL-161) referenced the THC limit as 50 ppmvd with NESHAP Subpart LLL as the reference. In accordance with Subpart LLL 63.1343(c)(4), as amended in the 12/20/06 Federal Register, the THC limit should have been 20 ppmvd since the pyroprocessing system did not commence construction until 2007. Subpart LLL, as amended in the 09/09/10 Federal Register, in 63.1343, Table 1, revised the THC limit for new and existing kilns to 24 ppmvd. This is the applicable limit and is the one shown in this permit. *(Note - The initial performance stack test conducted on 03/31/10 showed THC emissions of 6.2 ppmvd.)*

e. This limitation from NESHAP 40 CFR 63 Subpart LLL, as amended in the 12/20/06 Federal Register is effective until 09/08/2013 (40 CFR 63.1351(b)), or until compliance is demonstrated with the applicable Subpart LLL, as amended in the 09/09/10 Federal Register, limitation, whichever occurs first.

f. Compliance with this limitation from NESHAP 40 CFR 63 Subpart LLL, as amended in the 09/09/10 Federal Register, must be demonstrated no later than 09/09/13 (40 CFR 63.1351(b)).

*(**Annual Potential to Emit (PTE) Permitting Note** - In combination with the annual clinker production limitation of 1,095,000 tons per year, the above BACT emissions standards effectively limit annual potential emissions from this unit to: 1,588 tons/year of CO; 1,068 tons/year of NO_X (after year one); 83.8 tons/year of PM/PM_{10} ($PMPM_{10}$ potential emissions will be 21.9 TPY with new Subpart LLL(09/09/10 FR) limit which has final compliance date of 09/09/13); 110 tons/year of SO_2; and 66 tons/year of VOC.)*

[Rules 62-4.070(3), 62-204.800(11), 62-210.200 (Definition of Potential to Emit), 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NESHAP 40 CFR 63 Subpart LLL (as amended in the 12/20/06 FR, and the 09/09/10 FR); as partially established in Construction Permit 1190042-001-AC (PSD-FL-361)]

Control Technology

C.13. Baghouse PM/PM10 Emissions Control Device - The pyroprocessing system main baghouse emissions control system (EP/Baghouse ID E-19) shall be operated and maintained to remove particulate matter emissions from the pyroprocessing exhaust gas stream to achieve the PM/PM_{10} emissions standards specified in this permit.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The pyroprocessing system Main Baghouse (Baghouse/EP ID E-19), is subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR 64 at the time of issuance of this permit (see Specific Condition No. C.24.)

C.14. SNCR System - A selective non-catalytic reduction (SNCR) system shall be operated to achieve the permitted levels for NO_X emissions from the pyroprocessing system. The SNCR system will consist of an aqueous ammonia tank, pumps, piping, compressed air delivery, injectors, control system, and other ancillary equipment. Aqueous ammonia will be injected at a location(s) in the preheater/calciner with an appropriate temperature profile to support the SNCR process.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

Excess Emissions

(Permitting Note - The following conditions apply only to the SIP-based BACT emissions standards specified in Condition No. C.12. of this section. Rule 62-210-700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS or the NESHAP programs.)

C.15. Operating Procedures - The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the kiln and calciner, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.16. Definitions -

a. *Startup* is defined as the commencement of operation of any emissions unit which has shut down or ceased operation for a period of time sufficient to cause temperature, pressure, chemical or pollution control device imbalances, which result in excess emissions.

b. *Shutdown* means the cessation of the operation of an emissions unit for any purpose.

c. *Malfunction* means any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.

[Rule 62-210.200(159, 230, and 245), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.17. Excess Emissions Prohibited - Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data.
[Rule 62-210.700(4), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.18. Allowable Data Exclusions - Continuous monitoring data collected during periods of startup, shutdown, and malfunction may be excluded from the compliance demonstrations only in accordance with the following requirements, provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized. As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions replace the provisions in Rule 62-210.700(1), F.A.C.

a. *CO Data*: Each 30-day rolling average shall include all periods of operation (including startup, shutdown, and malfunction), but may exclude limited periods due to equipment malfunctions. No more than 30 hours in any calendar month shall be excluded from the compliance determinations due to equipment malfunctions. Malfunctions do not include process upsets that occur as a normal part of cement production.

b. *NO_X Data*: Each 30-day rolling average shall include all periods of operation (including startup, shutdown, and malfunction), but may exclude limited periods due to malfunctions of the SNCR system. "Malfunctions of the SNCR system" are defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia-based solutions into the kiln system. No more than 30 hours in any calendar month shall be excluded from the compliance determinations due to malfunctions of the SNCR system.

c. *SO_2 Data*. Each 24-hour rolling average shall include all periods of operation (including startup, shutdown, and malfunction).

d. *Other Data*: All valid opacity and VOC data shall be included in the compliance determination. If the mercury CEMS is used as the method for demonstrating compliance, all valid data shall be included in the compliance determination.

The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rules 62-210.200, 62-212.400 (Best Available Control Technology (BACT)), and 62-210.700, F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.19. Malfunction Notifications - If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction.

[Rules 62-210.700(6) and 62-4.130, F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Monitoring of Operations

C.20. Baghouse Temperature Monitor - A continuous temperature monitor shall be calibrated, operated, and maintained at the inlet to the baghouse for the kiln system exhaust in accordance with the D/F monitoring requirements of NESHAP Subpart LLL 40 CFR 63.1350(g).
[Rule 62-204.800(11), F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.21. Aqueous Ammonia Injection - A monitoring system to continuously monitor and record the aqueous ammonia injection rate of the SNCR system (1-hour block averages) shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.22. Continuous Flow Rate Monitoring **-** In accordance with to the requirements NESHAP Subpart LLL 40 CFR 63.1350(n) (as amended in the 09/09/10 Federal Register), the permittee shall operate, calibrate, and maintain instruments, for continuously measuring and recording the pollutant per mass flow rate to the atmosphere from sources subject to an emissions limitation that has a pounds per ton of clinker unit (i.e., the pyroprocessing system). The flow monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6.
[Rule 62-204.800(11), F.A.C.; NESHAP 40 CFR 63 Subpart LLL, as amended in the 09/09/10 FR); established in Construction Permit 1190042-001-AC (PSD-FL-361)]

C.23. Clinker Production Monitoring Requirements - In accordance with NESHAP Subpart LLL 40 CFR 63 (as amended in the 09/09/10 Federal Register), when the pyroprocessing system becomes subject to Subpart LLL 63.1343 (Table 1) lbs/ton emissions limitations on PM and Hg (i.e., no later than the 63.1351(b) compliance date of 09/09/13), the permittee must determine hourly clinker production in accordance with one of the methods of 63.1350(d).
[Rule 62-204.800(11), F.A.C.; NESHAP 40 CFR 63 Subpart LLL, as amended in the 09/09/10 FR)]

C.24. CAM Plan for Pyroprocessing System Main Baghouse (Emission Point/Baghouse ID E-19) - The Main Baghouse dust collector emission control device for this emissions unit (Baghouse/EP ID is E-19) is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[Rules 62-204.800(12) and 62-213.440(1)(b)1.a., F.A.C.; 40 CFR 64 (Compliance Assurance Monitoring)]

Continuous Emissions Monitoring Requirements

C.25. Required Continuous Emission Monitoring Systems (CEMS) - The permittee shall calibrate, operate and maintain continuous emissions monitoring systems (CEMS) to measure and record concentrations of the following pollutants in the pyroprocessing system main exhaust stack (Baghouse/EP ID E-19) in a manner sufficient to demonstrate continuous compliance with the emissions standards specified in this subsection for the pyroprocessing system.

a. carbon monoxide (CO);

b. nitrogen oxides (NO_X);

c. sulfur dioxide (SO_2);

d. mercury (Hg), and

e. volatile organic compounds/total hydrocarbons (VOC/THC)*.

* In addition a continuous oxygen (O_2) diluent monitor shall be calibrated, operated and maintained at the THC monitor location to correct measured THC emissions to the required oxygen concentration.

[Rules 62-4.070(3), 62-210.800(11), 62-212.400 (Best Available Control Technology (BACT)), and 62-297.520, F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NESHAP 40 CFR 63 Subpart LLL; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.26. Required Continuous Opacity Monitoring System (COMS) - A continuous opacity monitoring system (COMS) shall be calibrated, operated, and maintained in the pyroprocessing system main exhaust stack, after the main baghouse (Baghouse/EP ID E-19), in a manner sufficient to demonstrate continuous compliance with the opacity standard of Specific Condition No. C.12. Opacity shall be based on a 6-minute block average computed from at least one observation (measurement) every 15 seconds. For the COMS, the 6-minute block averages shall begin at the top of each hour. The COMS shall meet the applicable requirements of NESHAP Subpart LLL 40 CFR 63.1350, as amended in the 12/20/06 Federal Register.
[Rules 62-210.800(11), and 62-212.400 (Best Available Control Technology (BACT)); Appendix BD - Final BACT Determination and Emission Standards; NESHAP Subpart LLL 40 CFR 63.1350 (12/20/06 FR); Construction Permit 1190042-001-AC (PSD-FL-361)]

(COMS Requirement Permitting Note - NESHAP 40 CFR 63 Subpart LLL, as amended in the 09/09/10 Federal Register, establishes new requirements for PM which have a final compliance date of 09/09/13. These new requirements require a PM CEMS, but remove the visible emissions opacity limitation and also remove the continuous opacity monitoring systems (COMS) requirements. However, even after the above Subpart LLL amendments final compliance date, the opacity limitation and COMS requirements remain in effect because they were established as part of the PSD construction permit PM BACT determination.)

C.27. Additional NESHAP 40 CFR 63 Subpart LLL CEMS Required No Later Than 09/09/13 - In accordance with the requirements of NESHAP Subpart LLL (as amended in the 09/09/10 Federal Register) , 40 CFR 63.1350(b) & (l), and 63,1351(b), by no later than 09/09/13, continuous emissions monitoring system (CEMS) for particulate matter (PM) and hydrochloric acid (HCl) shall be installed, certified, calibrated, and operated and maintained to demonstrate continuous compliance with the PM and HCl emissions standards specified in Subpart LLL 40 CFR 63.1343, Table 1, and this permit.
[Rule 62-210.800(11), F.A.C.; NESHAP Subpart LLL (09/09/10 FR) 40 CFR 63.1350 and 63.1351]

C.28. CEMS Certification Requirements -

a. CO CEMS - The carbon monoxide continuous emissions monitoring system (CO CEMS) shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO CEMS span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

b. NO_X CEMS - The nitrogen oxides continuous emissions monitoring system (NOx CEMS) shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2. Quality assurance procedures shall conform to the requirements of in 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. The NO_X CEMS span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

c. SO_2 CEMS - The SO_2 monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR 60. The SO_2 monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

d. THC CEMS - The total hydrocarbon continuous emissions monitoring system (THC CEMS) (which is also used for volatile organic compounds (VOC) as VOC is measured as total hydrocarbons) shall meet the requirements of NESHAP Subpart LLL in 40 CFR 63 (40 CFR 63.1349 and 63.1350). The THC monitor shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).

e. Hg CEMS - The mercury continuous emissions monitoring system (Hg-CEMS) shall meet the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor phase Mercury Continuous Monitoring Systems in Stationary Sources," or has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. The owner or operator shall adhere to the calibration drift and quarterly accuracy assessment procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B.

f. PM CEMS *(when required)* - The PM CEMS (required by NESHAP Subpart LLL (09/09/10 FR) 40 CFR 63.1351(b) to be in operation no later than 09/09/13) shall meet the requirements of Subpart LLL (09/09/10 FR) 63.1350(b). It shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 11. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, Procedure 2. The required RATA tests shall be performed using EPA Method 5 or 5i in Appendix A of 40 CFR 60. The monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

g. HCl CEMS *(when required)* - The HCl CEMS (required by NESHAP Subpart LLL (09/09/10 FR) 40 CFR 63.1351(b) to be in operation no later than 09/09/13) shall meet the requirements of Subpart LLL (09/09/10 FR) 63.1350(1). It shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 15. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, Procedure 1 except that the RATA requirements of Procedure 1 must be replaced with the validation requirements and criteria of sections 11.1.1 and 12.0 of Performance Specification 15. The monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.

C.28. *(continued)*

CEMS, other than the Hg-CEMS, are also subject to the General Provisions specified in Subpart A of 40 CFR 60 (CO, NO_X, and SO_2) and Subpart A of 40 CFR 63 (THC/VOC, PM, HCl).

[Rules 62-4.070(3), 62-204.800(8) & (11); 62-210.800, 62-212.400 (Best Available Control Technology (BACT)), and 62-297.520, F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; 40 CFR 60 Appendix B and F; NESHAP Subpart LLL (09/09/10 FR) 40 CFR 63.1350; as partially established in Construction Permit 1190042-001-AC (PSD-FL-361)]

C.29. PM and HCl CEMS Installation, Certification (and Initial Compliance Demonstration) - In accordance with NESHAP Subpart LLL (09/09/10 FR) 40 CFR 63.1351(b), PM and HCl continuous monitoring systems (CEMS) shall be installed, in operation, and certified no later than 09/09/13. Upon certification of each CEMS, the owner or operator shall demonstrate compliance with the PM and HCl standards of Subpart LLL (09/09/10 FR) 40 CFR 63.1343, Table 1 in accordance with 63.1349(b)(1) & (6) and 63.1348(a)(1) & (6).
[Rules 62-4.070(3), 62-210.800(8) & (11), and 62-297.520, F.A.C.;, 40 CFR 50 Appendix B; 40 CFR 63.7(a)(2); NESHAP 40 CFR 63 Subpart LLL (09/09/10 FR); Construction Permit 1190042-001-AC (PSD-FL-361)]

C.30. CEMS Data Requirements - The CEMS shall be calibrated, maintained, and operated in the in-line kiln/raw mill stack to measure and record the emissions of CO, NO_X, SO_2, and THC/VOC in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEMS shall express the results in units of pounds per ton of clinker produced, and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hr, lb/ton of clinker) and ppmvd as propane corrected to 7% oxygen.

a. Valid Hourly Averages - Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour shall be used to calculate a 1-hour block average that begins at the top of each hour. Each 1-hour block average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel (or produced clinker) during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid.

   - Hours during which there is no kiln feed and no fuel fired are not valid hours.
   - Hours during which the plant is firing fuel but producing no clinker are valid, but these hours are excluded from the production-normalized emission rate computation (pounds per ton of clinker). These hours are included in any pollutant mass emission rate computation (pounds per hour).

b. 24-hour Rolling Averages (SO_2) - Compliance with the emission limit for SO_2 shall be based on a 24-hour rolling average that shall be recomputed after every valid hour as the arithmetic average of that hourly average and the preceding 23 valid hourly averages.

c. 30-day Rolling Averages (CO, THC and NOx) (also PM and HCL when required) - Compliance with the emission limits for CO, THC and NO_X shall be based on a 30-day rolling average. Each 30-day rolling average shall be the arithmetic average of all valid hourly averages collected during the last 30 operating days. A new 30-day rolling average shall be recomputed after every day of operation for the new day and the preceding 29 operating days. For purposes of

C.30. c. *(continued)*

computing these emission limits, an operating day is any day that the kiln produces clinker or fires fuel.

d. 7-day Rolling Average (PM/PM_{10},THC, Hg, and HCl during periods of startup and shutdown) - Compliance with the emission limits for PM/PM_{10},THC, Hg, and HCl during periods of startup and shutdown shall be based on a 7-day rolling average. For 7-day rolling averages, operating days include only days of operation during startup and shutdown and do not include periods of normal operation. Each 7-day rolling average shall be the arithmetic average of all valid hourly averages collected during startups or shutdowns during the last 7 operating days which included a startup or shutdown. A new 7-day rolling average shall be recomputed after every day of operation which included a startup and shutdown, for the new day and the preceding 6 operating days which included a startup or shutdown.

e. 30-day Block Average (VOC) - Compliance with the emission limits for VOC and THC shall be based on a 30-day block average. Each 30-day block average shall be the arithmetic average of all valid hourly averages occurring within each 30 operating-day block.

f. Data Exclusion - Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Limited amounts of CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Condition No. C.18 in this section. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

g. Availability - Monitor availability for each CEMS shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

h. Public Access - Emission data shall be available in real time on the company website.

[Rule 62-4.070(3), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Testing/Demonstration Requirements

C.31. Continuous Compliance - Continuous compliance with the permit standards for opacity and emissions of CO, NO_X, SO_2, Hg and VOC/THC shall be demonstrated with data collected from the required continuous emissions monitoring systems (CEMS/COMS). As required by NESHAP 40 CFR 63 Subpart LLL as amended in the 09/09/10 Federal Register, on and after 09/09/13, continuous compliance with the PM, Hg and HCl standards of 63.1343 shall be demonstrated using data collected from PM, Hg and HCl continuous emissions monitoring systems (CEMS) in accordance with 63.1348(b), and 63.1350(b), (k) and (l).
[Rules 62-201.800(11), 62-212.400(5)(c) and 62-297.310(7)(a) and (b), F.A.C.; Subpart A 40 CFR 60.8; NESHAP Subpart LLL (09/09/13 FR) 40 CFR 63.1348 and 63.1350]

C.32. Annual PM, CO, NO_X, and SO2 Compliance Testing - Annual compliance stack tests for particulate matter (PM), CO, NO_X, and SO_2, shall be conducted during each federal fiscal year (October 1st to September 30th). Data collected from the reference method during the required RATA tests for CO, NO_X, and SO_2 (and PM after the PM CEMS is installed) may be used to satisfy the annual testing requirement provided the notification requirements and emission testing requirements for performance and compliance tests of this permit are satisfied.
[Rules 62-297.310(7)(a) and (b), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.33. D/F Compliance Testing - Dioxins/furans (D/F) tests shall be conducted in accordance with the provisions of NESHAP Subpart LLL (as amended in the 09/09/10 Federal Register) 40 CFR 63.1348(a)(3) and 63.1349(b)(3). Frequency of testing shall be in accordance with the requirements of Subpart LLL 40 CFR 63.1348(c) and 63.1349(c) (i.e., every 30 months, or upon making a change in operations that may adversely affect compliance with the standard - *see Specific Condition below*).
[Rules 62-297.310(7)(a) and (b), F.A.C.; NSPS Subpart A 40 CFR 60.8; NESHAP Subpart LLL 40 CFR 63.1349(b) (09/09/10 FR); as established in Construction Permit 1190042-001-AC (PSD-FL-361)]

C.34. Supplemental Dioxin/Furan and PM/PM_{10} Compliance Tests - The owner or operator shall notify the Compliance Authority prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for dioxin/furan or PM/PM_{10}. For purposes of this condition, significant means any of the following: a physical or chemical change in the feed or fuel**;** the use of a raw material not previously used; a change in the LOI of the coal ash outside the normal range of monitored parameters; a change between non-beneficiated coal ash and beneficiated coal ash. Based on the information provided, the Compliance Authority will promptly determine if performance testing pursuant to 40 CFR 63.1349 will be required for the new feed or fuel. A significant change shall not include switching to a feed/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM/PM10 emission limits.
[Rule 62-4.070(3), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.35. Initial NESHAP 40 CFR 63 Subpart LLL (09/09/10) Performance Testing for PM and HCl – The permittee shall demonstrate initial compliance with the particulate matter (PM), mercury (Hg), and hydrochloric acid (HCl) limitations of NESHAP Subpart LLL 40 CFR 63.1343, Table 1 (as amended in the 09/09/10 Federal Register) by the 09/09/13 final compliance date established in 40 CFR 63.1351(b). Initial performance testing for PM, Hg, and HCl shall be conducted in accordance with Subpart LLL (09/09/10 FR) 40 CFR 63.1348(a)(1), (5), & (6), and 63.1349(b)(1), (5), & (6).
[Rule 62-204.800(11), F.A.C.; NESHAP 40 CFR 63 Subpart LLL (09/09/10 FR)]

C.36. Compliance Testing Requirements - Any required annual compliance tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. Tests shall be conducted for each required pollutant under the fuel scenario representing the highest potential for generating emissions. In general, this fuel scenario is firing coal as the primary fuel and TDF and petroleum coke, as secondary fuels. If a secondary fuel listed above is not available at the time of testing, tests shall be based on the fuels that are available. If a secondary fuel is added later, additional tests shall be conducted with that fuel scenario within 60 days of first fire of the new secondary fuel.
[Rules 62-204.800(8) & (11) and 62-297.310(7)(a) and (b), F.A.C.; NSPS Subpart A 40 CFR 60.8; NESHAP Subpart A 40 CFR 63 .7; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.37. Compliance Test Methods - Any required compliance stack tests shall be performed in accordance with the following test methods.

EPA Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
6C	Determination of SO_2 Emissions (Instrumental).
7E	Determination of NO_X Emissions (Instrumental). NO_X emissions testing shall be conducted with the air heater operating at the highest heat input possible during the test.
9	Visual Determination of Opacity
10	Measurement of Carbon Monoxide Emissions (Instrumental). The method shall be based on a continuous sampling train.
23	Measurement of Dioxin/Furan Emissions
25A	Measurement of Gaseous Organic Concentrations (Flame Ionization – Instrumental)
29 (or ASTM D6784-02)	Determination of Metals Emission from Stationary Sources (Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury Gas Generated from Coal-Fired Stationary Sources)

The methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. Tests shall be conducted in accordance with the appropriate test method and the applicable requirements specified in Appendix C of this permit, NSPS Subpart A in 40 CFR 60, and NESHAP Subparts A and LLL in 40 CFR 63.
[Rules 62-204.800(8) & (11), and 62-297.401, F.A.C.; 40 CFR 60 Appendix A; 40 CFR 63 Subparts A and LLL]

Recordkeeping and Reporting Requirements

C.38. Fuel Analysis Records - For each fuel delivery the owner or operator shall maintain records of the quantity of fuel delivered and a representative analysis of the fuel including the sulfur content, higher and lower heating value, proximate analysis, and ultimate analyses.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.39. Used Oil Records - For each shipment of used oil received, the owner or operator shall maintain records from the vendor certifying that the used oil meets the above requirements for "on-specification" used oil fuel. Records shall include the following parameters: arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs, sulfur content, coal ash, and heating value. Otherwise, the owner or operator shall sample and analyze each shipment of used oil received for the above parameters. If vendor certifications are relied upon, the owner or operator shall analyze at least one sample obtained each calendar year for the above parameters. If analytical results show that the used oil does not meet the above requirements, the owner or operator shall immediately: cease burning of the used oil, and notify the Compliance Authority of the analytical results. The analysis shall be performed via EPA-approved or ASTM methods. The permittee shall obtain, make, and keep the following records:

a. gallons of on-specification used oil received and burned each month;

b. name and address of all vendors delivering used oil to the facility;

c. copies of the vendor certifications, if obtained, and any supporting information; and

d. analytical results showing required parameters.

The records shall be retained in a form suitable for inspection at the facility by the Department, and shall be retained permanently.
[40 CFR 279.61, 40 CFR 761.20(e), and Rule 62-4.070(3), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.40. Operational Records – In order to demonstrate compliance with the limitations specified in Specific Condition Nos. C.2. through C.7., and C.14., the owner or operator shall maintain the following operational records on site.

For each 1-hour block of operation, continuously monitor and record the following:

a. dry preheater feed rate (tons/hour);

b. clinker production rate (tons/hour);

c. fuel sources in use and fuel firing rate(s) for each fuel;

d. heat input rate (based on the representative heating value and the hourly fuel firing rate of each fuel); and

e. SNCR system NH_3/NO_X molar ratio or ammonia injection rate.

Records shall also document the following for each 24-hour rolling period and consecutive12 month period:

f. dry preheater feed rate (tons/24 hours and tons/12 consecutive months); and

g. clinker production rates (tons/24 hours and tons/12 consecutive months).

[Rule 62-4.070(3), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

C.41. On-Specification Used Oil Usage Records - In order to demonstrate compliance with the usage limitations specified in Specific Condition No. C.8., the permittee shall keep the following records of on-specification used oil usage in the pyroprocessing system.

Daily records shall consist of:

a. gallons of on-specification *(see Specific Condition No. C.9. for definition)* used oil used each day in the pyroprocessing system (gallons/day);

b. amount of time each day that any pyroprocessing equipment was in operation firing on-specification used oil (hours/day); and

c. daily average gallons/hour on-specification used oil firing rate, based on a. and b. above (a/b).

Monthly records shall consist of:

d. total pyroprocessing system on-specification used oil usage for the month (gallons/month);

e. total pyroprocessing system on-specification used oil usage for the most recent 12-consecutive month period (gallons/12-consecutive months).

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

C.42. Tire Derived Fuel (TDF) Heat Input Rate Records - In order to demonstrate compliance with the whole or chipped tire derived fuel (TDF) heat input rate limitations specified in Specific Condition No. C.7., the permittee shall keep the following hourly records of pyroprocessing system TDF heat input rate.

a. the total pyroprocessing system TDF heat input rate (TDF MMBtu/hour);

b. the total pyroprocessing system heat input rate from all fuels (Total MMBtu/hour);

c. the % of the total pyroprocessing rate heat input rate provided by TDF, based on a. and b. above (a/b x 100)

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

C.43. Annual Mercury (Hg) BACT Emission Limitation Compliance Demonstration -

a. Material Balance Demonstration - If not using the mercury (Hg) CEMS to demonstrate compliance with the Annual Hg BACT emission limitation *(see b. below)*, the owner or operator shall demonstrate compliance with the Hg throughput limitation by material balance and maintaining records of the monthly and rolling 12-month mercury throughput. Samples of the raw mill feed and all fuels shall be collected each day. A single composite daily sample shall be made from all samples collected during a day. A monthly composite sample shall be made from each of the daily composite samples. Each monthly composite sample shall be analyzed to determine the mercury concentration of the materials representative for the month. The analytical methods used to determine mercury concentration shall be EPA or ASTM methods such as EPA Method 7471A (Mercury in Solid or Semisolid Waste). No other methods may be used unless prior written approval is received from the Department. For each raw material and fuel, the monthly mercury throughput rate (pounds per month) shall be the product of the mercury concentration from the monthly composite sample and the mass of raw material or fuel used during the month. If the mercury concentration is below detection limit or below the limits of quantification, the detection limit will be assumed for the concentration of the raw material or fuel. For each month, the mass of mercury introduced into the pyroprocessing system (pounds per month) shall be the sum of the monthly mercury throughput rate for each raw material and

C.43.a. *(continued)*

fuel. The consecutive 12-month mercury throughput rate shall be the sum of the individual monthly records for the current month and the preceding eleven months (pounds of mercury per consecutive 12-months). Such records, including calculations and data, shall be completed no later than 25 days following the month of the records.
[Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.; as established in Construction Permit 1190042-001-AC (PSD-FL-361)]

b. Use of Mercury Continuous Emissions Monitoring System (Hg CEMS) - The permittee may use the Hg-CEMS to demonstrate compliance with the BACT cumulative 12-month rolling Hg mass emission limitation (122 pounds per rolling 12-month period) in lieu of the procedures described in the preceding paragraph.
[Rules 62-4.070(3) and 62-212.400(2)(g), F.A.C.; established in Construction Permit 1190042-001-AC (PSD-FL-361)]

C.44. SIP Quarterly Report - Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing: equipment malfunctions resulting in excluded CEMS data and/or excess emissions; mercury throughput rates (based on material balance) or Hg emissions (based on Hg CEMS) *(see Specific Condition above)*; and the monitor availability of each CEMS. The report shall contain the information and follow the general format specified in Appendix F of this permit.
[Rules 62-4.070(3), 62-4.130, and 62-212.400(BACT), F.A.C.; established in Construction Permit 1190042-001-AC (PSD-FL-361)]

Other Requirements

C.45. Additional Federal NESHAP Requirements - In addition to the applicable requirements of NESHAP 40 CFR Subpart LLL, as amended in the 09/09/10 Federal Register (09/09/10 FR), referenced in this Emission Unit Subsection and in Specific Subsection J. (Common Condition), Specific Condition No. J2., this emissions unit is also subject to certain requirements of NESHAP 40 CFR 63 Subpart LLL as amended in the 12/20/06 Federal Register (12/20/06 FR) until the final compliance date of 09/09/13 *(see 63.1351(b) of Subpart LLL (09/09/10 FR))* for the revised requirements of the Subpart LLL 09/09/10 FR amendments. These applicable Subpart LLL (12/20/06 FR) requirements, which relate to emission limitations for PM and Hg and associated compliance, monitoring and reporting requirements, are shown below. NESHAP 40 CFR 63 Subpart LLL as amended in the 12/20/06 Federal Register is attached to and made as a part of this permit as Appendix NESHAP 40 CFR 63 Subpart LLL (12-20-06 FR).

NESHAP 40 CFR 63 Subpart LLL (12/20/2006 FR) Applicable Provision References *
*(Note - **Entire section** applies unless otherwise noted with specific applicable subsection references shown below the section caption.)*

40 CFR
Section

General

§ 63.1340 Applicability and designation of affected sources.

§ 63.1341 Definitions.
(continued)

C.45. *(continued)*

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

§ 63.1343 Standards for kilns and in-line kiln/raw mills.
(a), (c)(1), (c)(2) & (c)(5) *(PM and Hg limitations only)*

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.
(c)

§ 63.1350 Monitoring requirements.
(c)(l), (o), (p)

§ 63.1351 Compliance dates.

§ 63.1352 Additional test methods.

Notification, Reporting and Recordkeeping

§ 63.1354 Reporting requirements.

§ 63.1355 Recordkeeping requirements.

Other

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

§ 63.1358 Implementation and enforcement.

(Permitting Note - The above applicability references are based upon current operations as reflected in the initial Title V permit renewal application dated 08/09/10 and subsequent request for additional information response letter dated 01/04/11. Any change in operations may change the applicable provisions. Some of the applicable Subpart LLL (12/20/06 FR) requirements are also included as Specific Conditions or referenced in the emission unit subsections.)*

[Rules 62-204.800(11) and 62-213.440, F.A.C.; NESHAP 40 CFR 63 Subpart LLL (12/20/06 FR); Construction Permit 1190042-001-AC (PSD-FL-361)]

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
004	Clinker and Additives Storage and Handling

This emissions unit consists of clinker handling from clinker cooler to clinker silo discharge, and clinker and additive (limestone, gypsum and other materials) handling from storage to the finish mill.

The following emissions points (EP) in the raw materials conveying, storage, and processing are controlled by fabric filter baghouses.

Baghouse /EP ID	Emissions Point (EP) Description	Baghouse Description
L-03	Clinker Cooler Discharge	CAMCORP Model 15TR12x30 baghouse with design exhaust air flow rate of 3,000 acfm
L-06	Clinker Transfer to Clinker Silo #1	CAMCORP Model 8TR12x64 baghouse with design exhaust air flow rate of 6,500 acfm
M-08	Clinker Transfer to Clinker Silo #2	CAMCORP Model 6TR12x42 baghouse with design exhaust air flow rate of 4,000 acfm
DC-1	Clinker Transfer from Clinker Silo #1	four filter baghouse with design exhaust air flow rate of 353 acfm
DC-2	Clinker Transfer from Clinker Silo # 2	four filter baghouse with design exhaust air flow rate of 353 acfm

IMPORTANT Permitting Note *- See also* ***Subsections I and J*** *of this permit for Applicable Standards and Regulations, Notes, and Specific Conditions common to this and other emissions units.*

Control Technology

D.1. Baghouse Controls - Each emissions point (EP) identified above for the clinker and additives storage and handling operations shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains/dscf and a PM_{10} design specification of 0.007 grains/dscf.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The baghouses associated with this emissions unit (see table above), are not subject to the requirements of 40 CFR 64 (Compliance Assurance Monitoring (CAM) because there are no applicable particulate matter emission limitations for this emissions unit.)*

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Unless otherwise specified, the averaging time for Specific Condition D.2. is based on the specified averaging time of the applicable test method.

D.2. Visible Emissions (VE) Limitations - Visible emissions shall not exceed the following limits.

a. Visible emissions are limited to 5% opacity from each of the emissions points (EP) shown in the EP table above and controlled by a baghouse*.

b. Visible emissions are limited to 10% opacity from any other emissions point associated with this emissions unit and not controlled by a baghouse.

(Permitting Note - The baghouses are designed to control PM emissions to 0.01 grains/dry standard cubic foot (gr/dscf) and PM_{10} emissions to 0.007 gr/dscf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 4 TPY. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the 10% opacity VE limitations given in NSPS 40 CFR 60 Subpart F or NESHAP 40 CFR 63 Subpart LLL. [Construction Permit 1190042-001-AC (PSD-FL-361)])*

[Rules 62-204.800(8) and (11), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; NSPS Subpart F 40 CFR 60.62(c); NESHAP Subpart LLL 40 CFR 63.1345; Construction Permit 1190042-001-AC (PSD-FL-361)]

Monitoring of Operations

D.3. Periodic Monitoring Requirements - Each affected emissions point (EP) subject to an opacity standard shall be periodically monitored using the procedures described in 40 CFR 63.1350(f) to ensure compliance with the requirements of Specific Condition Nos. D.1. and D.2.
[Rules 62-4.070(3) and 62-204.800(11), F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f); Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Test Methods and Procedures

(Permitting Note - The attached Table 2, 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.4. Test Methods - Required compliance tests or periodic monitoring shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources (for VE opacity compliance tests)
22	Visual Determination of Fugitive Emissions From Material Sources (for opacity periodic monitoring)

D.4. *(continued)*

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-297.401, and 62-204.800(11) F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f)(1); Construction Permit 1190042-001-AC (PSD-FL-361)]

D.5. Annual Visible Emissions (VE) Compliance Tests Required - The baghouse exhaust vents for the emission points (EP) shown in the EP table above shall each be tested to demonstrate compliance with the visible emissions standard of Specific Condition No. D.2.a. during each federal fiscal year (October 1st to September 30th).
[Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

The specific conditions in this section apply to the following emissions unit:

EU ID No.	Brief Description
005	Finish Mill (Cement Grinding)

This emissions unit consists of a cement finish (grinding) mill in a closed circuit with a high efficiency air separator and cyclones capable of processing approximately 159 tons per hour of cement. Other equipment includes associated enclosed conveyors, bucket elevators, and belts.

The following emissions points (EP) in the finish mill/cement grinding process are controlled by fabric filter baghouses.

Baghouse/ EP ID	Emissions Point (EP) Description	Baghouse Description
N-93	Finish Mill Air Separator	CAMCORP Model 110TR12x1760 baghouse with design exhaust air flow rate of 150,000 acfm
N-94	Finish Mill Sweep (Sepol vent)	CAMCORP Model 29TR12x464 baghouse with design exhaust air flow rate of 40,000 acfm

IMPORTANT Permitting Note *- See also* ***Subsections I and J*** *of this permit for Applicable Standards and Regulations, Notes, and Specific Conditions common to this and other emissions units.*

Control Technology

E.1. Baghouse Controls - Each emissions point (EP) identified above for the finish mill grinding operations shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains/dscf and a PM_{10} design specification of 0.007 grains/dscf.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The Finish Mill Separator baghouse (Baghouse/EP ID N-93), while it does have an applicable particulate matter mass emission limitation (see Specific Condition No. E.2.), is not subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR 64 since it is inherent process equipment whose function is to separate fine cement for transfer to the cement silos from coarse cement that goes back into the finish mill for further grinding. The Finish Mill Sweep baghouse (Baghouse/EPID N-94) is not subject to CAM because there is no applicable particulate matter emission limitation.)*

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Unless otherwise specified, the averaging time for Specific Condition E.2. is based on the specified averaging time of the applicable test method.

E.2. Particulate Matter (PM/PM_{10}) Standard for Finish Mill Air Separator (EP ID N-93) - Particulate matter (PM/PM_{10}) emissions from the finish mill air separator baghouse (Emission Point (EP) ID N-93) shall not exceed 0.007 grains per dscf of exhaust as determined by EPA method 5. All PM emitted from the baghouse exhaust is assumed to be PM_{10}. The BACT requirements do not waive or vary any applicable NESHAP monitoring or record keeping requirements
[Rules 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Permitting Note - This emissions point accounts for almost 25% (34.9 TPY) of the facility's total PM emissions. [Construction Permit 1190042-001-AC (PSD-FL-361)])

E.3. Visible Emissions (VE) Limitation for Finish Mill Air Separator (Baghouse/EP ID N-93) - Visible emissions from the finish mill air separator baghouse (EP ID N-93) are limited to 5% opacity.
[Rule 62-212.400(BACT), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

E.4. Visible Emissions (VE) Limitation for Finish Mill Sweep (Baghouse/EP ID N-94) - Visible emissions from the finish mill sweep baghouse (EP ID N-94) are limited to 5% opacity.

(Permitting Note - The applicant advised that the baghouse is designed to control PM emissions to 0.01 grains/dry standard cubic foot (gr/dscf) and PM_{10} emissions to 0.007 gr/dscf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for this emission point in this emission unit system will be less than 5.8 TPY. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the 10% opacity VE limitations given in NSPS 40 CFR 60 Subpart F or NESHAP 40 CFR 63 Subpart LLL. [Construction Permit 1190042-001-AC (PSD-FL-361)])

[Rules 62-204.800(8) and (11), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NSPS Subpart F 40 CFR 60.62(c); NESHAP Subpart LLL 40 CFR 63.1343; Construction Permit 1190042-001-AC (PSD-FL-361)]

Monitoring of Operations

E.5. Periodic Monitoring Requirements - Each affected emissions point (EP) subject to an opacity standard shall be periodically monitored using the procedures described in 40 CFR 63.1350(f) to ensure compliance with the requirements of Specific Condition Nos. E.1., E.3. and E.4.
[Rules 62-4.070(3) and 62-204.800(11), F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f); Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Test Methods and Procedures

(Permitting Note - The attached Table 2, 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. Test Methods - Required compliance tests or periodic monitoring shall be performed in accordance with the following reference methods:

Method(s)	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
9	Visual Determination of the Opacity of Emissions from Stationary Sources (for VE opacity compliance tests)
22	Visual Determination of Fugitive Emissions From Material Sources (for opacity periodic monitoring)

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-297.401, and 62-204.800(11) F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f)(1); Construction Permit 1190042-001-AC (PSD-FL-361)]

E.7. Annual Visible Emissions (VE) Compliance Tests Required - The baghouse exhaust vents for the mission points (EP) shown in the EP table above shall each be tested to demonstrate compliance with the visible emissions standards of Specific Condition Nos. E.3. and E.4. during each federal fiscal year (October 1st to September 30th).
[Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

E.8 PM Compliance Testing for Finish Mill Air Separator Baghouse (EP ID N-93) Prior to Permit Renewal - The exhaust vent for the finish mill air separator baghouse (EP ID N-93) shall be tested for particulate matter (PM) emissions to demonstrate compliance with the PM emission limitation of Specific Condition No. E.2. The compliance testing shall be conducted prior to renewal of the Title V operation permit during the 365 -270 day period prior to the expiration date of this operation permit.
[Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Subsection F. Emissions Unit (EU) No. 006 - Cement Handling, Storage, Packing, and Loadout

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
006	Cement Handling, Storage, Packing, and Loadout

This emission unit includes cement conveyance to silos, cement silos, loadout to trucks from silos, and cement bagging operations. Equipment will include two concrete cement silos with rotary shut-off valves, flow control valve, and airslides. The cement bagging operation includes a screen, surge hopper, bucket elevator and packer. Operation is estimated to be nominally 500 tons per hour of cement to truck loadout and/or bagging operation.

The following emissions points (EP) in the cement handling, storage, packing, and loadout systems are controlled by fabric filter baghouses.

Baghouse/ EP ID	Emissions Point (EP) Description	Baghouse Description
N-91	Cement Transfer from Finish Mill	CAMCORP Model 9TR12x81 baghouse with design exhaust air flow rate of 8,000 acfm
Q-25	Cement Silos #1, 2, 3, and 5	CAMCORP Model 11TR12x121 baghouse with design exhaust air flow rate of 12,000 acfm
Q-26	Cement Silo #4	CAMCORP Model 11TR12x121 baghouse with design exhaust air flow rate of 12,000 acfm
Q-14	Truck Loadout #1	CAMCORP Model 7TR8x49 baghouse with design exhaust air flow rate of 3,000 acfm
Q-17	Truck Loadout #2	CAMCORP Model 7TR8x49 baghouse with design exhaust air flow rate of 3,000 acfm
R-12A	Packing (Bagging) Plant	CAMCORP Model 11TR12x121 baghouse with design exhaust air flow rate of 12,000 acfm

IMPORTANT Permitting Note *- See also* ***Subsections I and J*** *of this permit for Applicable Standards and Regulations, Notes, and Specific Conditions common to this and other emissions units.*

Control Technology

F.1. Baghouse Controls - Each emissions point (EP) identified above for cement handling, storage, packing and loadout operations shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains/dscf and a PM_{10} design specification of 0.007 gr/dscf.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The baghouses associated with this emissions unit (see table above), are not subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR 64 requirements of 40 CFR 64 because there are no applicable particulate matter emission limitations for this emissions unit.)*

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Unless otherwise specified, the averaging time for Specific Condition F.2. is based on the specified averaging time of the applicable test method.

F.2. Visible Emissions (VE) Limitations - Visible emissions shall not exceed the following limits.

a. Visible emissions are limited to 5% opacity from each of the emissions points (EP) shown in the EP table above controlled by a baghouse*.

b. Visible emissions are limited to 10% opacity from any other emissions point associated with this emissions unit and not controlled by a baghouse.

(Permitting Note - The baghouses are designed to control PM emissions to 0.01 grains/dry standard cubic foot (gr/dscf) and PM_{10} emissions to 0.007 gr/dscf. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM_{10} for all emission points in this emission unit system will be less than 15.1 TPY. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the 10% opacity VE limitations given in 40 CFR 60 Subpart F or 40 CFR 63, Subpart LLL.* [*Construction Permit 1190042-001-AC (PSD-FL-361)])*

[Rules 62-204.800(8) & (11), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; NSPS Subpart F 40 CFR 60.62(c); NESHAP Subpart LLL 40 CFR 63.1343N; Construction Permit 1190042-001-AC (PSD-FL-361)]

Monitoring of Operations

F.3. Periodic Monitoring Requirements - Each affected emissions point subject to an opacity standard shall be periodically monitored using the procedures described in 40 CFR 63.1350(f) to ensure compliance with the requirements of Specific Condition Nos. F.1. and F.2.
[Rules 62-4.070(3) and 62-204.800(11), F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f); Construction Permit 1190042-001-AC (PSD-FL-361)]

Compliance Test Methods and Procedures

(Permitting Note - The attached Table 2, 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.4. Test Methods - Required compliance tests or periodic monitoring shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources (for VE opacity compliance tests)
22	Visual Determination of Fugitive Emissions From Material Sources (for opacity periodic monitoring)

F.4. *(continued)*

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-297.401, and 62-204.800(11) F.A.C.; NESHAP Subpart LLL 40 CFR 63.1350(f)(1); Construction Permit 1190042-001-AC (PSD-FL-361)]

F.5. Annual Visible Emissions (VE) Compliance Tests Required - The baghouse exhaust vents for the mission points (EP) shown in the EP table above shall each be tested to demonstrate compliance with the visible emissions standard of Specific Condition No. F.2.a. during each federal fiscal year (October 1st to September 30th).
[Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
007	Coal and Petroleum Coke Grinding System

The coal and petroleum coke grinding system includes coal/petroleum coke handling from railcar unloading to the pulverized fuel bin. Equipment will include a coal/petroleum coke grinding mill with thermal dryer, storage bins, and associated conveyor systems. Clinker cooler gas will be used for drying.

The following emissions points (EP) in the coal and petroleum coke grinding system are controlled by fabric filter baghouses (one of which also acts as a material separator).

Baghouse/ EP ID	Emissions Point (EP) Description	Baghouse Description
S-22	Coal/Petroleum Coke Mill (including Thermal Dryer)	two (2) CAMCORP Model 12PRW233 baghouse separators, each with design exhaust air flow rate of 17,500 acfm (combined common exhaust stack)
S-26	Coal/Petroleum Coke Bin	CAMCORP Model 8PRT19 baghouse with design exhaust air flow rate of 800 acfm

Applicable Standards and Regulations Notes

PSD BACT Determinations - A determination of the Best Available Control Technology (BACT) was made for particulate matter (PM/PM_{10}). To satisfy some of the BACT requirements for this emission unit the visible emissions limits act as surrogate standards for PM.
[Rule 62-212.400 (Prevention of Significant Deterioration (PSD)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards Construction Permit 1190042-001-AC (PSD-FL-361)]

Federal New Source Performance Standards (NSPS) Requirements - This emissions unit is subject to 40 CFR 60, Subpart A (General Provisions) and 40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants)* *(see Specific Condition No. G.10.)*. The Department determines that the BACT emissions performance requirements are as stringent as or more stringent than the limits imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subpart.
[Rule 62-204.800(8), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Subpart Y Applicability Note Construction of the various components of this emission unit were commenced on or before December 3, 2007, which is before the April 28, 2008 and May 27, 2009 trigger dates contained in Subpart Y for the applicability of some requirements.)*

IMPORTANT Permitting Note *- See also* ***Subsection I*** *of this permit for Specific Conditions common to this and other emissions units.*

Essential Potential to Emit (PTE) Parameters

G.1. Process Rate Limitation - The coal/petroleum coke grinding mill may process up to 18.5 tons per hour of coal/petroleum coke. No more than 134,904 tons of coal/petroleum coke shall be processed through the grinding mill during any consecutive 12 month period. *(See Specific Condition No. G.9. for recordkeeping requirements associated with these process rate limitations.)*
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(Permitting Note - For emissions unit operating rate limitation after testing, see the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.])

Control Technology

G.2. Baghouse Controls - Each emissions point identified above for the coal and petroleum coke grinding system shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.01 grains/dscf and a PM_{10} design specification of 0.007 gr/dscf.
[Rules 62-4.070(3) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

(CAM Applicability Permitting Note - The Coal/Petroleum Coke Mill baghouse (Baghouse/EP ID S-22), while it does have an applicable particulate matter mass emission limitation (see Specific Condition No. G.4.), is not subject to the Compliance Assurance Monitoring (CAM) requirements of 40 CFR 64 since it is inherent process equipment whose function is to separate fine coal/pet coke for transfer to the coal silos from coarse coal/pet coke that goes back into the coal mill for further grinding. The Coal/Petroleum Coke Bin baghouse (Baghouse/EP ID S-26) is not subject to CAM because there is no applicable particulate matter emission limitation which applies to this emissions point.)*

Emission Limitations and Standards

(Permitting Note - The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit)

Unless otherwise specified, the averaging times for Specific Conditions G.3. and G.4. are based on the specified averaging time of the applicable test method.

G.3. Particulate Matter (PM/PM_{10}) Standard - Particulate matter (PM/PM_{10}) emissions from the thermal dryer (Emission Point (EP) ID S-22) shall not exceed 0.007 grains per dscf (gr/dscfm) of exhaust as determined by EPA Method 5.

(NSPS Subpart Y Note – This BACT determination PM limit is more stringent than the applicable NSPS Subpart Y 40 CFR 60.252(a)(1) PM limit of 0.031 gr/dscfm. Demonstration of compliance with the BACT PM limitation will also be considered as demonstration of compliance with NSPS Subpart Y.)

[Rules 62-204.800(8), and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD – Final BACT Determination and Emission Standards; NSPS Subpart Y 40 CFR 60.252]

G.4. Visible Emissions (VE) Limitations - Visible emissions shall not exceed the following limits.

a. Visible emissions from any emissions point (EP) shown in the EP table above and controlled by a baghouse shall not exceed 5% opacity (applies to EP ID S-22 and S-26).

b. Visible emissions from all coal/petcoke processing and conveying equipment, coal/petcoke storage systems, or coal/petcoke transfer and loading systems not controlled by a baghouse, shall not exceed 10% opacity.

(NSPS Subpart Y Note – These BACT determination VE opacity limits are more stringent than the applicable NSPS Subpart Y 40 CFR 60.252(a)(2) and 60.254(a) VE limits of 20% opacity. Demonstration of compliance with the BACT VE limitations will also be considered as demonstration of compliance with NSPS Subpart Y.)

[Rules 62-204.800(8) and 62-212.400 (Best Available Control Technology (BACT)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; NSPS Subpart Y 40 CFR 60.252; Construction Permit 1190042-001-AC (PSD-FL-361)]

Continuous Monitoring Requirements

G.5. Thermal Dryer Exit Temperature - A monitoring device for the continuous measurement of the temperature of the gas stream at the exit of the thermal dryer shall be installed, calibrated, maintained, and continuously operated to measure the temperature of the gas stream in accordance with the requirements of 40 CFR, Subpart Y.
[Rule 62-204.800(8), F.A.C.; NSPS Subpart Y 40 CFR 60.256(a)]

Compliance Test Methods and Procedures

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

G.6. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods and the applicable NSPS provisions:

Test Method(s)	Description of Test Method and Comments
1-4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Matter from Stationary Sources (all PM is assumed to be PM_{10})
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above test methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-204.800(8) and 62-297.401, F.A.C.; NSPS Subpart Y 40 CFR 60.257; Construction Permit 1190042-001-AC (PSD-FL-361)]

G.7. Annual Visible Emissions (VE) Compliance Tests Required - The baghouse exhaust vents for Emission point (EP) ID's S-22 and S-26 shall be tested to demonstrate compliance with the visible emissions standard of Specific Condition No. G.4.a. during each federal fiscal year (October 1st to September 30th), **[**Rule 62-297.310(7), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

G.8. Particulate Matter (PM) Compliance Tests Prior To Permit Renewal - To demonstrate compliance with the emission limit in Specific Condition G.3., compliance tests for particulate matter (PM/PM_{10}) emissions from Emission Point (EP) ID S-22 shall be performed within the 365 – 270 day period prior to the expiration date of this operation permit**.**
[Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Reporting and Recordkeeping Requirements

G.9. Coal/Petroleum Coke Grinding Mill Process Rate Records - In order to document compliance with the coal/petroleum coke grinding mill process rate limitations of Specific Condition No. G.1., the permittee shall maintain the following records of the monthly grinding mill processing rate:

a. the month of the record;

b. the total quantity of coal and petroleum coke processed through the grinding mill for the month (tons coal/petroleum coke per month);

c. the total hours of operation of the grinding mill for the month (hours/month) (operation of the grinding mill is defined as periods of operation when coal or petroleum coke is being processed (ground) by the mill);

d. the average grinding mill coal/petroleum coke processing rate (tons/hour) for the month (based on b. and c. above); and

e. the total tons of coal and petroleum processed through the grinding mill in the most recent 12 consecutive month period (tons coal/petroleum coke per 12 consecutive month period).

The above reports shall be recorded and available for inspection no later than 10 days following the end of the month.
[Rules 62-4.070(3) and 62-213.440(1)(b), F.A.C.]

Other Requirements

G.10. Federal Rule Requirements - In addition to the specific conditions listed above, this emissions unit is also subject to the applicable requirements contained in Federal New Source Performance Standard (NSPS) 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants), and Subpart A (General Provisions to 40 CFR 60), which are attached to and made a part of this permit in Appendix NSPS 40 CFR 60 Subpart Y and Appendix NSPS 40 CFR 60 Subpart A. The applicable Subpart Y requirements are shown below. Some of these requirements have also been included in the Specific Conditions above (*Specific Conditions G.3 through G.6.).*

NSPS 40 CFR 60 Subpart Y (10-08-09 FR) Applicable Provision References *

*(Note - **Entire section** applies unless otherwise noted with specific applicable subsection references shown below the section caption.)*

40 CFR Section

§ 60.250 Applicability and designation of affected facility.
(a) & (b)

§ 60.251 Definitions.

§ 60.252 Standards for thermal dryers.
(a)

§ 60.254 Standards for coal processing and conveying equipment, coal storage systems, transfer and loading systems, and open storage piles.
(a)

§ 60.255 Performance tests and other compliance requirements.
(a)

§ 60.256 Continuous monitoring requirements.
(a)

§ 60.257 Test methods and procedures.
(a) & (b)(1) – (b)(5)

§ 60.258 Reporting and recordkeeping.
(b)(3), (c), & (d)

(Subpart Y Applicability Note - The above applicability references are based upon current operations as reflected in the initial Title V permit renewal application dated August 9, 2010 and subsequent request for additional information response letter dated January 4, 2011. The equipment/operations in this EU are subject to NSPS Subpart Y **as units constructed on or before April 28, 2008**. Any change in operations or modification of equipment may change the applicable provisions.)*

[Rules Rule 62-204.800(8) and 62-213.440, F.A.C.; NSPS 40 CFR 60 Subpart Y; Construction Permit 1190042-001-AC (PSD-FL-361)]

The specific conditions in this section apply to the following emissions unit (EU):

EU ID No.	Brief Description
008	Fugitive Dust From Storage Piles, Paved Roads, and Unpaved Roads

Essential Potential to Emit (PTE) Parameters

H.1. Hours of Operation - The hours of operation for the activities included in this emissions unit are not limited (i.e., permitted for 8,760 hours per year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

Performance Requirements

H.2. Unconfined Emissions of Particulate Matter -

a. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions. Such activities include, but are not limited to: vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling.

b. Reasonable precautions shall include the following:

(1) Landscaping and planting of vegetation.

(2) Application of water to control fugitive dust from activities such as demolition of buildings, grading roads, construction, and land clearing.

(3) Water supply lines, hoses and sprinklers shall be located near all stockpiles of raw materials, coal, and petroleum coke.

(4) All plant operators shall be trained in basic environmental compliance and shall perform visual inspections of raw materials, coal and petroleum coke periodically and before handling. If the visual inspections indicate a lack of surface moisture, such materials shall be wetted with sprinklers. Wetting shall continue until the potential for unconfined particulate matter emissions are minimized.

(5) Water spray shall be used to wet the materials and fuel if inherent moisture and moisture from wetting the storage piles are not sufficient to prevent unconfined particulate matter emissions.

(6) As necessary, applications of asphalt, water, or dust suppressants to unpaved roads, yards, open stockpiles and similar activities.

(7) Paving of access roadways, parking areas, manufacture area, and fuel storage yard.

(8) Removal of dust from buildings, roads, and other paved areas under the control of the owner or operator of the facility to prevent particulate matter from becoming airborne.

(9) A vacuum sweeper shall be used to remove dust from paved roads, parking, and other work areas.

(continued)

H.2. *(continued)*

(10) Enclosure or covering of conveyor systems where practicably feasible.

(11) All materials at the plant shall be stored under roof. Materials, other than quarried materials, shall be stored on compacted clay or concrete, or in enclosed vessels.

(12) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

(13) Confining abrasive blasting where possible.

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

[Rules 62-212.400 (Best Available Control Technology (BACT)), and 62-296.320(4)(c), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

Subsection I. The specific conditions in this section apply to the following emissions units:

EU ID No.	Brief Description
002	Raw Materials Conveying, Storage, and Processing
003	Pyroprocessing System
004	Clinker and Additives Storage and Handling
005	Finish Mill (Cement Grinding)
006	Cement Handling, Storage, Packing, and Loadout
007	Coal and Petroleum Coke Grinding System

Essential Potential to Emit (PTE) Parameters

I.1. Hours of Operation - These emissions units are permitted to operate continuously (i.e., for 8,760 hours per year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

I.2. Emissions Unit Operating Rate Limitation After Testing - See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Compliance Testing Requirements

I.3. Common Testing Requirements - Unless otherwise specified, compliance tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit, as well as the applicable NSPS or NESHAP compliance testing provisions.
[Rules 62-204.800(8) & (11) and 62-297.310, F.A.C.; NSPS 40 CFR 60 Subparts A and F; NESHAP 40 CFR 63 Subparts A and LLL; Construction Permit 1190042-001-AC (PSD-FL-361)]

Operation and Maintenance (O&M) Plans

I.4. Baghouse O&M Plan - For each baghouse the permittee shall prepare and follow an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log.
[Rules 62-4.070(3) and 62-204.800(11), F.A.C.: NESHAP Subpart LLL 40 CFR 63.1347; Construction Permit 1190042-001-AC (PSD-FL-361)]

Reporting and Recordkeeping Requirements

I.5. Compliance Test Reports - For each compliance test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. *(See Condition TR8. in Appendix TR, Facility-Wide Testing Requirements for additional test report requirements.)*
[Rule 62-297.310(8), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

I.6. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

(Recordkeeping Note - See also Specific Condition No. I.4. for Baghouse O& M Plan recordkeeping requirements.)

Subsection J. The notes and specific conditions in this section apply to the following emissions units:

EU ID No.	Brief Description
002	Raw Materials Conveying, Storage, and Processing
003	Pyroprocessing System
004	Clinker and Additives Storage and Handling
005	Finish Mill (Cement Grinding)
006	Cement Handling, Storage, Packing, and Loadout

Applicable Standards and Regulations Notes:

PSD BACT Determinations - A determination of the Best Available Control Technology (BACT) was made for particulate matter (PM/PM_{10}) for these emissions units. To satisfy some of the BACT requirements for these emission units the visible emissions limits act as surrogate standards for PM.
[Rule 62-212.400 (Prevention of Significant Deterioration (PSD)), F.A.C.; Appendix BD - Final BACT Determination and Emission Standards; Construction Permit 1190042-001-AC (PSD-FL-361)]

Federal NESHAP Requirements -These emission units are subject to 40 CFR 63 Subpart A (General Provisions) and 40 CFR 63, Subpart LLL (National Emissions Standard for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry), as amended in the September 9, 2010 Federal Register (09/09/10 FR).
[Rule 62-204.800(11), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(NESHAP Subpart LLL Applicability Note - Construction of the components of this Portland cement manufacturing plant was commenced on or before July 9, 2007, which is before the May 6, 2009 trigger date contained in Subpart LLL for the applicability of some requirements for "new" sources. This facility is thus considered an "existing" source for the purposes of the applicability this subpart's requirements.)*

Federal New Source Performance Standards (NSPS) Requirements - These emissions units are subject to 40 CFR 60 Subpart A (General Provisions) and 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants)*. The Department determines that the BACT emissions performance requirements of this permit are as stringent as or more stringent than the imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subpart.
[Rule 62-204.800(8), F.A.C.; Construction Permit 1190042-001-AC (PSD-FL-361)]

(NSPS Subpart F Applicability Note - Construction of the components of this Portland cement manufacturing plant was commenced on or before July 9, 2007, which is before the June 16, 2008 trigger date contained in Subpart F for the applicability of some requirements.)*

Specific Conditions:

Federal Rule Requirements

J.1. Federal Rule Requirements - In addition to the specific condition included in the applicable individual Emission Unit Subsections, these emissions units are also subject to the applicable requirements contained in Federal New Source Performance Standards (NSPS) 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) as amended in the 09/09/10 Federal Register, and Subpart A (General Provisions for 40 CFR 60), which are attached to and made a part of this permit in Appendix NSPS 40 CFR 60 Subpart F (09-09-10 FR) and Appendix NSPS 40 CFR 60 Subpart A. The Subpart F applicable requirements are shown below.

NSPS 40 CFR 60 Subpart F (09/09/10 FR) Applicable Provision References *

*(Note - **Entire section** applies unless otherwise noted with specific applicable subsection references shown below the section caption.)*

40 CFR
Section

§ 60.60 Applicability and designation of affected facility.

§ 60.61 Definitions.

§ 60.62 Standards.
(a)(1)(i), (a)((2), (b)(1)(i), (b)(2) through (4), (c) & (d)

§ 60.64 Test methods and procedures.
(a), (b) & (d)

§ 60.66 Delegation of authority.

(Permitting Note - The above applicability references are based upon current operations as reflected in the initial Title V permit renewal application dated August 9, 2010 and subsequent request for additional information response letter dated January 4, 2011. The equipment/operations in these EUs are subject to NSPS Subpart F as units constructed on or before April 28, 2008. Any change in operations or modification of equipment may change the applicable provisions.)*

[Rules Rule 62-204.800(8) and 62-213.440, F.A.C.; NSPS 40 CFR 60 Subpart F; Construction Permit 1190042-001-AC (PSD-FL-361)]

J.2. Federal NESHAP Requirements - In addition to the specific condition included in the applicable individual Emission Unit Subsections, these emissions units are also subject to the applicable requirements contained in Federal National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subpart LLL (National Emissions Standards for Hazardous Air Pollutants Standards of Performance from the Portland Cement Manufacturing Industry), as amended in the 09/09/10 Federal Register , and Subpart A (General Provisions for 40 CFR 63), which are attached to and made a part of this permit in Appendix NSPS 43 CFR 60 Subpart LLL (09-09-10 FR) and Appendix NSPS 43 CFR 60 Subpart A. The applicable requirements are shown below.

(continued)

J.2 *(continued)*

NESHAP 40 CFR 63 Subpart LLL (09/09/10 FR) Applicable Provision References *

*(Note - **Entire section** applies unless otherwise noted with specific applicable subsection references shown below the section caption.)*

40 CFR
Section

General

§ 63.1340 What parts of my plant does this subpart cover?

§ 63.1341 Definitions.

Emission Standards and Operating Limits

§ 63.1342 Standards: General.

§ 63.1343 What standards apply to my kilns, clinker coolers, raw material dryers, and open clinker piles.
(a), (b)* & (c)

(Section (b) Table 1 (Emission Limits for Kilns, Clinker Coolers, Raw Material Dryers, Raw and Finish Mills) applies as "existing" sources, except for the existing EU 003 Pyroprocessing System emission limitations for PM, Hg, and HCl. These limits (and associated compliance testing and emission monitoring requirements) do not apply until 09/09/13 (see 63.1351(b) Compliance Dates). Until that date the PM and Hg emission limits from Subpart LLL, as amended in the 12/20/06 Federal Register, apply for these pollutants. The 12/20/06 version of Subpart LLL does not include HCl limitations, so no HCl limitation apply until the above 09/09/13 compliance date.)*

§ 63.1344 Affirmative defense for exceedance of emission limit during malfunction.

§ 63.1345 Emissions limits for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills, and open clinker piles.

§ 63.1346 Operating limits for kilns.

§ 63.1347 Operation and maintenance plan requirements.

§ 63.1348 Compliance requirements.

Monitoring and Compliance Provisions

§ 63.1349 Performance testing requirements.

§ 63.1350 Monitoring requirements.
(a), (d), (f), (g), (i), (j), & (m) through (p) *

(Subsections (b) and (l), requirements for continuous emissions monitoring for PM and HCl from EU 003, Pyroprocessing System, will apply beginning on 09/09/2013.)*

(continued)

J.2 *(continued)*

§ 63.1351 Compliance dates.
(a) through (c)

§ 63.1352 Additional test methods.

Notification, Reporting and Recordkeeping

§ 63.1353 Notification requirements.

§ 63.1354 Reporting requirements.

§ 63.1355 Recordkeeping requirements.

Other

§ 63.1356 Sources with multiple emission limits or monitoring requirements.

§ 63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

§ 63.1358 Implementation and enforcement.

Table 1 to Subpart LLL of Part 63—Applicability of General Provisions

(Permitting Note - The above applicability references are based upon current operations as reflected in the initial Title V permit renewal application dated 08/09/10 and subsequent request for additional information response letter dated 01/04/11. Any change in operations may change the applicable provisions. Some of the applicable Subpart LLL requirements are also included as Specific Conditions in the emission unit subsections.)*

[Rules 62-204.800(11) and 62-213.440, F.A.C.; NESHAP 40 CFR 63 Subpart LLL; Construction Permit 1190042-001-AC (PSD-FL-361)]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary *

Appendix BD – Final BACT Determination and Emission Standards

Appendix CAM, Compliance Assurance Monitoring Plan

Appendix I, List of Insignificant Emissions Units and/or Activities *

Appendix ICE, Requirements for Internal Combustion Engines *

Appendix NESHAP 40 CFR 63Subpart A (General Provisions for 40 CFR 63)

Appendix NESHAP 40 CFR 63 Subpart LLL (Emissions Standards for Hazardous Air Pollutants for the Portland Cement Manufacturing Industry)

Appendix NSPS 40 CFR 60 Subpart A (General Provisions for 40 CFR 60)

Appendix NSPS 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants)

Appendix NSPS 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants)

Appendix NSPS 40 CFR 60 Subpart OOO (Standards of Performance for Non-Metallic Mineral Processing Plants)

Appendix RR, Facility-wide Reporting Requirements *

Appendix TR, Facility-wide Testing Requirements *

Appendix TV, Title V General Conditions *

** These documents are included together in a Combined Appendices & Attachments electronic file.*

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

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.

** The above documents are included together in a Combined Appendices & Attachments electronic file*.