CEMEX Construction Materials Florida, LLC
Brooksville North Cement Plant

Facility ID No. 0530010
Hernando County

Title V Air Operation Permit Renewal

Permit No. 0530010-045-AV
(Renewal of Title V Air Operation Permit No. 0530010-015-AV)

Permitting Authority:

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

13051 North Telecom Parkway
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DRAFT/PROPOSED PERMIT

PERMITTEE:
CEMEX Construction Materials Florida, LLC
10311 Cement Plant Road
Brooksville, Florida 32669

Permit No. 0530010-045-AV
Brooksville North Cement Plant
Facility ID No. 0530010
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Brooksville North Cement Plant is located in Hernando County at 16301 Ponce De Leon Boulevard, Brooksville, Florida. UTM Coordinates are: Zone 17, 356.1 East and 3169.3 North. Latitude is: 28° 38' 36.7" North; and, Longitude is: 82° 28' 19.3" West.

Emissions Unit Shutdown and Permit Renewal Expiration Date:
At the time the renewal application for this permit was received, this facility had been shut down since December 12, 2008 and was not expected to resume operation (start up) before December 12, 2013. Therefore a shutdown period of five years will be exceeded; however, the five year shutdown date will occur 17 days after the November 25, 2013, expiration date of Title V Permit No. 0530010-015-AV. In accordance with Rule 62-210.300(2)(a)3.c., F.A.C. the emissions units in this permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown. In this case, the expiration date will be either five years from the effective date of the permit or ten years from the date of shutdown which occurs on December 12, 2018, whichever date occurs first.

Important Startup Requirements:

1. Notification of Startup - Per Rule 62-210.300(5), F.A.C., the permittee shall notify the Department in writing of the intent to start up any emissions unit or facility, a minimum of 60 days prior to the intended startup date. The notification shall include information as to the startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
2. Compliance Test Notification - Per Rule 62-297.310(7)(a)9., F.A.C The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
3. Compliance Tests After Startup – After restarting the facility, each of the facility's emissions unit shall be tested to demonstrate compliance with all applicable emissions standard. See Specific Condition FW10 for details.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Effective Date: Date, 200x
Renewal Application Due Date: Exp. Date -225, 20xx
Expiration Date: Eff. Date + 5 years, 20xx

(Draft/Proposed)

_____
Kelley M. Boatwright
District Air Program Administrator
Southwest District

KMB/ds/admin

Subsection A. Facility Description.

This facility produces portland cement and masonry cement as a final product and consists of two Polysius GEPOL preheater kilns (Kilns 1 and 2), two clinker coolers and associated raw material handling and storage, raw mills, finish mills, clinker handling and storage, cement handling and storage, cement rail and truck loadout equipment, cement bagging equipment, coal bins and handling equipment, and associated air pollution control devices. The nominal capacity of each kiln is 780,000 tons per year of clinker.

Raw materials used to manufacture cement clinker include limestone, sand, fly ash and mill scale, sources of calcium, silica, aluminum and iron. These materials are metered to two pre-mixing bins prior to introduction to the raw mills (one for each kiln). The raw mills dry and grind the raw materials to a fineness that is suitable for the preheater kiln systems. The raw mill product is transported to raw mill blending silos where it is further mixed to assure physical and chemical consistency in the kiln feed (raw meal). The raw mill is then metered to each of the preheaters at a rate of 150 tons per hour (30-day average). Nominally 135 tons per hour of feed reaches each kiln and 15 tons per hour of feed is recirculated. In the rotary kilns, the raw mill is heated to temperatures exceeding 2600 ^{0} F, which results in the production of Portland cement clinker. The clinker production rate is nominally 60 percent of the preheater feed rate, or about 90 tons per hour at maximum operation. The clinker is then cooled in clinker coolers (one for each kiln) and transported to the finish mills (3), where it is mixed with gypsum (and other additives) and ground to produce Portland cement. The finished product is stored in cement silos prior to being shipped off-site in bulk by truck or rail cars, or sent to cement bagging lines where it is bagged.

The two kilns are permitted to use fuel oil, natural gas, coal and tire-derived fuel (Kiln 1 only) as fuels, with coal being the primary fuel. Kiln exhaust gases are used to pre-heat the incoming raw feed in the preheaters and to dry raw material in the raw mill grinding systems before being vented to kiln baghouse dust control devices.

Air pollution emission controls include Selective Non-Catalytic Reduction (SNCR) systems on both kilns for control of NOx emissions, and baghouse dust collectors on most of the emission units for control of particulate matter (PM/PM_{10}). The SNCR systems inject ammonia solutions near the lowest part of the kiln preheaters at a point in the process characterized by a temperature window of between 1550 and 2100 F. The equipment consists of an aqueous ammonia tank, pumps, piping, compressed air delivery systems, injectors, control systems and other ancillary equipment.

Emissions from each kiln system (kiln, kiln preheater and raw mill) are vented through separate kiln baghouses and exhaust stacks. Emissions from each of the clinker coolers are also vented to separate clinker cooler baghouses and exhaust stacks. The remainders of the facility emissions are vented from individual baghouse exhaust stacks/vents or are non-stack/vent fugitive emissions.

Each of the two kiln stacks and the two clinker cooler stacks are equipped with continuous opacity monitoring systems (COMS). The two kiln stacks are also equipped with nitrogen oxides (NOx) and carbon monoxide (CO) continuous emissions monitoring systems (CEMS).

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

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
002	Kiln No. 1 Feed System (Baghouse D-31)
003	Cement Kiln No. 1 (Baghouse E-55)
004	Cement Plant Clinker Cooler No. 1 (Baghouse F-18)
005	Finish Mills Nos. 1 & 2 (Baghouses G-23-1 & G-23-2)
006	Clinker Storage Silo Nos. 1 & 2 (Baghouse F-31)
008	Kiln No. 1 Blending Silo Nos. 1 and 2 (Baghouse F-17 & E-36)
009	Portland Cement Storage Silos Nos. 1-5 (Baghouse H-03)
011	Raw Material Storage Silos & Feed System (Baghouses C-11 & C-11A)
012	Kiln No. 2 Blending Silo (No. 5 Blending Silo) (Baghouse G-11)
013	Kiln No. 2 Feed System (Baghouse H-13)
014	Cement Kiln No. 2 (Baghouse E-19)
015	Cement Clinker Cooler No. 2 (Baghouse K-09)
016	Clinker Silo No. 3 (Baghouse L-07)
017	Clinker/Gypsum Transfer Belt (Baghouse M-09)
018	Finish Mill No. 3 Clinker Day Tank & Gypsum Day Silo (Baghouse M-10)
019	Finish Mill No. 3 (Baghouse N-23)
021	Cement Silos Nos. 7 & 8 (Baghouse P-05)
022	Masonry Cement Storage Silo (Baghouse P-07)
023	Truck Loadout System (Baghouse Q-17)
024	Raw Material Pre-Mix Bins (Baghouse M-2280)
025	Additive Material Storage Bin and Outsized Clinker Hoppers (Baghouse M-1171)
026	Cement Bag Loadout System (Line No. 1) (Baghouse M-3514)
027	Cement Bagging Line No. 2 (Baghouse M-3515)
028	Facility Wide Fugitive Particulate Matter Emissions
031	Raw Material (Limestone) Quarrying, Crushing and Storage
032	Coal Handling and Grinding
034	Two Emergency Spark Ignition Engines (4SRB existing stationary RICE)

EU No. Notes: Emission Unit ID Nos. 001, 007, 010, 020, 029 and 030 are not included as part of this facility. EU ID Nos. 001, 020, 29 and 30 were emissions units that were never constructed. EU ID No. 007 is an inactive emission unit that was permanently shutdown in approximately 1985. EU ID No. 010 is an emission unit number that is not assigned to any past or current emission unit in the FDEP ARMS database (i.e., it is not in the database).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received April 12, 2013, 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.

Regulation	**EU No(s).**
Federal Regulations	
40 CFR 60, Subpart A - General Provisions	031, 032
40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants. *(See Applicability Notes, No. 1.)*	002, 003, 004, 005, 006, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 021, 022, 023, 024, 025, 026, 027, 028
40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation and Processing Plants. *(See Applicability Notes, No. 2.)*	032
40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants. *(See Applicability Notes, No. 3.)*	031
40 CFR 63, Subpart A – General Provisions.	002, 003, 004, 005, 006, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 021, 022, 023, 024, 025, 026, 027, 028
40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry *(See Applicability Notes, No. 1.)*	002, 003, 004, 005, 006, 008, 009, 011, 012, 013, 014, 015, 016, 017, 018, 019, 021, 022, 023, 024, 025, 026, 027, 028
40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	034
State Regulations	
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All
BACT Determination (Appendix BACT, Construction Permit No. 0530010-003-AC (PSD-FL-233))	003, 004, 014, 015

Applicability Notes:

1. NESHAP 40 CFR 63, Subpart LLL and NSPS 40 CFR 60, Subpart F - In accordance with 40 CFR 63.1356 of NESHAP Subpart LLL (version dated 2/12/2013) and 40 CFR 60.62(d) of NSPS Subpart F, if an affected facility subject to this subpart has a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emissions limit or requirement and is exempt from the less stringent requirement.

    - In accordance with the provisions of 40 CFR 63.1340, NESHAP Subpart LLL applies to all of the operations and emission sources at this facility beginning with the raw material storage silos, through bagging and bulk (rail and truck) loading of the cement final product.
    - In accordance with the provisions of 40 CFR 60.60, NSPS Subpart F applies to all of the operations and emission sources at this facility beginning with the raw material storage silos, through bagging and bulk (rail and truck) loading of the cement final product.

    Because the kiln was not constructed, reconstructed or modified since June of 2008, the only applicable requirement of 40 CFR 60, Subpart F is an opacity limit specified in 40 CFR 60.62(c). 40 CFR 63, Subpart LLL also contains opacity standards that are as stringent as the affected facilities covered by 40 CFR 60 Subpart F. 40 CFR 63, Subpart LLL also contains additional emissions limits for other pollutants that are not covered by 40 CFR 60 Subpart F.

2. NSPS 40 CFR 60 Subpart Y - In accordance with 40 CFR 63.1356 of NESHAP Subpart LLL (version dated 2/12/2013), if an affected facility subject to this subpart has a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, the owner or operator of the affected facility must comply with the most stringent emissions limit or requirement and is exempt from the less stringent requirement. At this facility:

    - 40 CFR 60 Subpart Y applies to Coal Handling and Grinding (EU No. 032), and
    - 40 CFR 63, Subpart LLL applies to and any coal handling source activity past the grinding mills.

3. NSPS 40 CFR 60 Subpart OOO - In accordance with 40 CFR 63.1340(c) of NESHAP Subpart LLL (version dated 2/12/2013), onsite sources that are subject to standards for nonmetallic mineral processing plants in 40 CFR 60, Subpart OOO are not subject to 40 CFR 60 Subpart LLL. At this facility:

    - 40 CFR 60 Subpart OOO applies to the Raw Material (Limestone) Quarrying , Crushing and Storage (EU No. 031), and
    - 40 CFR 63, Subpart LLL applies to the raw material storage silos (EU No. 011) onward through the process.

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.

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

[Rule 62-296.320(1), F.A.C.]

FW4. General Visible Emissions - Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (< 20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.

{Permitting Note - This condition does not supersede any more stringent conditions in this permit.}

[Rule 62-296.320(4)(b)1., F.A.C.]

FW5. Unconfined Particulate Matter - No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility are included in Emissions Unit No. 028, "Facility-Wide Fugitive Particulate Matter Emissions". [Rule 62-296.320(4)(c), F.A.C.]

Other Requirements

FW6. Waste Disposal - The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not preclude the permittee from the obligation of securing any other types of required permits, licenses, or certifications.
[Construction Permit No. 0530010-003-AC/PSD-FL-233]

FW7. Modifications - No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.; Construction Permit No. 0530010-018-AC]

FW8. Maintenance of Records - At a minimum, all records and logs required by this permit shall be updated monthly. *(See also Appendix TV, Conditions TV30.b. and TV30.c.)*
[Rule 62-4.070(3), F.A.C.]

FW9. Effective Date - When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

FW10. Compliance Tests After Startup – After restarting the facility (following the long terms shutdown period which began on 12/8/2008) each of the facility's emissions unit shall be tested to demonstrate compliance with all applicable emissions standard. The tests shall be conducted within 90 days after achieving the maximum production rate at which the emissions unit will operate, but no later than 180 days after startup of the emissions unit.
[Rule 62-4.070(3), F.A.C.]

Annual Reports and Fees

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

FW11. Annual Operating Report - The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. The report shall contain the following information pursuant to Subsection 403.061(13), F.S.

a. Annual amount of materials and/or fuels utilized, including the total quantity of "on-specification" used oil fired. (A summary of the range of analysis values for each constituent/property referenced in the "on-specification" used oil *(See Specific Condition No. F.6)*);

b. The total weight of whole tire-derived fuel (WTDF) fired during the previous year in Kiln No. 1.

{Permitting Note - See also Appendix RR, Condition No. RR5.}

[Rule 62-210.370(3), F.A.C.]

FW12. 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. *(See also Appendix RR, Condition No. RR6.)*
[Rule 62-213.205, F.A.C.]

FW13. 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. *(See also Appendix RR, Condition No. RR7.)*
[Rules 62-213.440(3)(a)2. & 3. and (3)(b), F.A.C.]

FW14. 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]

***IMPORTANT NOTES TO PERMITTEE*:**

Permit Renewal - see Appendix TV, Condition No. TV18.
(Note: Renewal application is due 225 days prior to expiration date of this permit.)

Title V Semi-Annual Monitoring Reports – see Appendix RR, Condition No. RR4.

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

EU ID No.	Brief Description
-031	Raw Material (Limestone) Quarrying, Crushing and Storage This emission unit consists of the limestone raw material quarrying, crushing, storage and handling activities. Limestone rock from the quarrying operation is loaded to a Wobbler sizing feeder hopper. The Wobbler feeder sizes the rock and transfers oversized rock to the jaw crusher and undersized rock to the screen, where fine material is screened out. After the primary jaw crusher the crushed rock is sent to the secondary crusher for additional crushing. After the raw material is crushed in the secondary crusher, it is sent through the new cross belt analyzer to determine the amount of limestone in the raw material. If the limestone content in the raw material is less than 75%, then the limestone corrector system is activated. This corrector system consists of a separate high quality limestone hopper and feed conveyor belt. Via this feed belt, high quality limestone from this limestone hopper is added as required to the main feeder belt coming from the secondary crusher. The high quality limestone is added until the cross belt analyzer indicates that the limestone content is back up to 75%. When this occurs, the corrector system feed belt is shut off until it is needed again. The blended limestone is then conveyed to the Limestone A-Frame Reclaimer Storage Building for storage until it is conveyed to the Limestone Surge Bin, and from there to the Raw Material Pre-Mix Bins (EU No. 024). Also part of this emission unit are the storage piles, conveyor belts, hoppers and transfer points associated with the storage, conveying and handling of the limestone raw material. Power to drive the Wobbler sizing feeder, the primary jaw crusher and the secondary crusher is supplied by electric engines, so there are no fuel combustion emissions associated with operation of this equipment. These operations are a potential source of fugitive particulate matter emissions. The moisture content of the rock is approximately 12-14%, which reduces potential fugitive emissions. In addition, the crushers and conveyors and limestone A-Frame Reclaimer are enclosed, further controlling fugitive emissions.

Federal Regulations

A.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants (see Appendix NSPS 40 CFR 60, Subpart OOO). In accordance with 40 CFR 60.670(a)(1), this emission unit is subject to and shall comply with the applicable requirements of 40 CFR 60 Subpart OOO and Subpart A. The applicable requirements of 40 CFR 60 Subpart OOO are included in Specific Condition No. A.2.
[Rules 62-204.800(8)(b) & (d) and 62-213.440, F.A.C.; 40 CFR 60 Subparts A and OOO; Construction Permit No. 0530010-027-AC]

A.2. NSPS 40 CFR 60, Subpart OOO Applicable Provision References – Applicability references listed in the table below are based upon operations at the time the Title V permit renewal application dated 04/12/13 was submitted. Any change in operations may change the applicable provisions.
*(**NOTE:** Entire section applies unless otherwise noted with specific applicable subsection references below the section Title.)*

Section	Title	Items
60.670	Applicability and designation of affected facility.	(a), (d) through (f)
60.671	Definitions.	
60.672	Standard for particulate matter (PM).	(b) through (d)
60.673	Reconstruction.	
60.675	Test methods and procedures.	(a), (c)(1)(3), (e)
60.676	Reporting and recordkeeping.	(a), (j)

[Rule 62-204.800(8)(b) and (d), F.A.C.; 40 CFR 60 Subpart OOO]

Essential Potential to Emit (PTE) Parameters

A.3. Hours of Operation - The operations associated with this emission unit (Raw Material (Limestone) Quarrying, Crushing, Storage and Handling) are permitted for continuous operation (i.e., 8,760 hours/year).
[Rules 62-4.160(2) and 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-027-AC]

A.4. 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.}

A.5. Visible Emissions Limitations - In accordance with NSPS Subpart OOO 40 CFR 60.670(a)(1) and 60.672(b), visible emissions (VE) from fugitive particulate matter emissions from the Raw Material Crushing System shall not exceed the opacity limitations shown below:

Raw Material Crushing System Emission Source Description	VE Limit in % opacity (Subpart OOO citation)
Transfer to Wobbler Feeder	10% (40 CFR 60.672(b))
Wobbler Feeder	10% (40 CFR 60.672(b))
Transfer from Wobbler Feeder to Jaw Crusher	10% (40 CFR 60.672(b))
Transfer from Wobbler Feeder to Screen	10% (40 CFR 60.672(b))
(Primary) Jaw Crusher	15% (40 CFR 60.672(b))

Raw Material Crushing System Emission Source Description	VE Limit in % opacity (Subpart OOO citation)
Transfer from Jaw Crusher to Conveyor to Secondary Crusher	10% (40 CFR 60.672(b))
Screen	10% (40 CFR 60.672(b))
Transfer from Screen to Undersize Pile	10% (40 CFR 60.672(b))
Transfer from Screen to Conveyor to Cement Plant	10% (40 CFR 60.672(b))
Transfer from conveyor to Secondary Crusher	10% (40 CFR 60.672(b))
Secondary Crusher	15% (40 CFR 60.672(b))
Transfer from Secondary Crusher to Conveyor to Cement Plant	10% (40 CFR 60.672(b))
Conveyor to Cement Plant	10% (40 CFR 60.672(b))
Loading of Limestone Correction Hopper	10% (40 CFR 60.672(b))
Transfer from Limestone Correction Hopper to Conveyor Belt	10% (40 CFR 60.672(b))
Other conveyors and transfer points	10% (40 CFR 60.672(b))

[Rules 62-204.800(8)(b) and 62-296.320(4)(b)1., F.A.C.; 40 CFR 60.670 and 60.672 (Subpart OOO); Construction Permit No. 0530010-027-AC]

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.6. Compliance Test Methods - Required compliance tests 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 (minimum 30 minutes test duration)

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.
[Rule 62-297.401, F.A.C.; Construction Permit No. 0530010-027-AC]

A.7. 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.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310, F.A.C.]

A.8. Additional NSPS Subpart OOO VE Testing Provisions - In accordance with the provisions of 40 CFR 60.675(a), (c) and (e), in determining compliance with the fugitive emissions visible emissions standards of Specific Condition No. A.5., the permittee shall use Method 9 and the procedures in Subpart A 40 CFR 60.11, with the following additions:

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

b. The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

c. If emissions from two or more facilities *(emission sources)* continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

1. Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.
2. Separate the emissions so that the opacity of emissions from each affected facility can be read.

[Rules 62-204.800(8)(b) & (d), F.A.C.; 40 CFR 60.675 (Subpart OOO) and 40 CFR 60.11 (Subpart A); Construction Permit No. 0530010-027-AC]

A.9. Process Rate During Testing - Testing of emissions from an emissions source shall be accomplished during a period when it is being continuously operated at a process rate representative of normal operation. The estimated actual process rate (tons per hour) during the test shall be included in each test report. Failure to include the actual process rate with the test report, or operating at conditions which do not reflect the normal operating conditions may invalidate the test.
[Rules 62-4.070(3), and 62-297.310(2), F.A.C.; Construction Permit No. 0530010-027-AC]

A.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), all of the emission sources listed in Specific Condition No. A.5. shall be tested to demonstrate compliance with its corresponding visible emissions standards.
[Rule 62-297.310(7)(a)4., F.A.C.; Construction Permit No. 0530010-027-AC]

Reporting Requirements

A.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-011	Raw Material Storage Silos & Feed System (Baghouses C-11 & C-11A) The Raw Material Storage Silos and Feed System for Kiln Nos. 1 and 2, consists of a Sand Storage Silo, a Flyash Storage Silo, and a belt conveyor system to transfer raw material from the raw material storage silos (including limestone, mill scale, sand, and flyash silos/hoppers) to Raw Material Pre-Mix Bin Nos. 1 and 2 (EU No. 024). Raw material is conveyed from the raw material storage silos to the raw material pre-mix bins at a maximum total transfer rate of 330 tons/hour. The Sand Silo is loaded from an outdoor sand pile via a belt conveyor at a maximum rate of 125 tons /hour. The Flyash Silo is loaded pneumatically from flyash trucks at maximum loading rate of 50 tons/hour. Particulate matter emissions from the raw material storage silos are controlled by a Western Precipitation Model PF-6012-60 Pulse Flow, 15,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse C-11). Particulate matter emissions from the transfer belt are controlled by an American Air Filter Model 12-48-70, 10,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse C-11A).

Federal Regulations

B.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

B.2. Permitted Capacity - The maximum process rates for the operations that are a part of this emission unit shall not exceed the following:

Process/Operation	Maximum Process Rate	Averaging Time	Basis
Sand Silo loading	125 tons/hour	Daily	Dry
Flyash Silo loading	50 tons/hour	Daily	Dry
Transfer of raw material to the Raw Material Pre-Mix Bin	330 tons/hour	Daily	Dry

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258573 and 0530010-018-AC]

B.3. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-258573]

B.4. 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.}

B.5. Visible Emissions Limitation - Visible emissions (VE) from the raw material storage silos and raw material feed system shall not exceed the following limits:

Source	Baghouse ID	% Opacity
Raw material storage silos	C-11	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
Transfer belt	C-11A	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)

{Permitting Note - The opacity limits specified in Permit No. 0530010-030-AC (BART Project) are more stringent than the requirements of 40 CFR 60 Subpart LLL}

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-258573 and 0530010-030-AC (BART Project)]

B.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from the raw material storage silos and the raw material feed system shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Raw material storage silos	C-11	1.29	5.66
Transfer belt	C-11A	0.86	3.77

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-258573]

B.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition B.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse exhaust VE limitation not to exceed an opacity of 5% in lieu of particulate matter stack testing (applies to Baghouses C-11 and C-11A).
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC27-258573 and 0530010-030-AC (BART Project)]

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.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

B.9. 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. In addition to the common testing requirements and procedures specified in Appendix TR, the permittee shall also comply with the following requirements.

a. Operation Rate During Testing: Compliance testing of emissions from the Raw Material Storage Silos baghouse (Baghouse C-11) should be conducted during a period of simultaneous loading of both the Sand and Flyash silos within 90-100% of the maximum permitted silo loading rates of 125 tons/hour for the sand silo, and 50 tons/hour for the flyash silo, if feasible. Testing of emissions from the Raw Material Transfer baghouse (Baghouse C-11A) should be conducted within 90-100% of the maximum permitted transfer rate of 330 tons/hour of raw material to the Raw Material Pre-Mix Bin, if feasible.

b. Test Report Requirements: The process rate data (Sand and Flyash Silo loading rates and rate of transfer of raw material to the Raw Material Pre-Mix Bin (in tons/hour), as applicable based on which baghouse is being tested) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate(s) during the test periods, or operating at conditions which do not reflect the normal operating conditions, may invalidate the tests and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit No. AC27-258565]

B.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the raw material storage silos and raw material feed system baghouse dust control devices (Baghouses C-11 and C-11A) exhausts shall be tested to demonstrate compliance with the emissions standards for particulate matter and visible emissions standards.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. B.7.}

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

Recordkeeping and Reporting Requirements

B.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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

B.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Conditions B.2. and B.9., the permittee shall maintain the following daily records for the Raw Material Storage Silos & Feed System.

a. Sand Silo
   1. The total hours of operation (operation is defined as any period when sand is being loaded/transferred to the Sand Silo).
   2. The total amount of sand loaded to the Sand Silo, in tons.
   3. The daily average Sand Silo loading rate, in tons/hour, based on items 1. and 2. above.

b. Flyash Silo
   1. The total hours of operation (operation is defined as any period when flyash is being loaded/transferred to the Flyash Silo).
   2. The total amount of flyash loaded to the Flyash Silo, in tons.
   3. The daily average Flyash Silo loading rate, in tons/hour, based on items 1. and 2. above.

c. Transfer of raw material to the Raw Material Pre-Mix Bin
   1. The total hours of operation (operation is defined as any period when raw material is being loaded/transferred to the Raw Material Pre-Mix Bin).
   2. The total amount of raw material transferred to the Raw Material Pre-Mix Bin, in tons.
   3. The daily average raw material transfer rate, in tons/hour, based on items 1. and 2. above.

Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-258573]

Other Requirements

B.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-024	Raw Material Pre-Mix Bins (Baghouse M-2280) Raw material is transferred by belt conveyor from the raw material storage silos (EU No. 011) to the two pre-mix bins (EU No. 024) at a maximum transfer rate of 330 tons/hour on a daily average basis. The pre-mix bins are loaded with limestone, sand, fly ash and other raw materials (such as mill scale and bauxite) for use in Raw Mill Nos. 1 and 2. Particulate emissions from both of the pre-mix bins are controlled by an American Air Filter Fabri-Pulse 12-96-1530, 10,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-2280).

Federal Regulations

C.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

C.2. Permitted Capacity - The maximum rate of transfer of raw material to Raw Material Pre-Mix Bin Nos. 1 and 2 combined shall not exceed the following:

Maximum Process Rate	Averaging Time	Basis
330 tons/hour	Daily	Dry

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-018-AC]

C.3. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-258574]

C.4. 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.}

C.5. Visible Emissions Limitation - Visible emissions (VE) from Raw Material Pre-Mix Bin Nos. 1 and 2 shall not exceed 10% opacity.

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-258574]

C.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from Raw Material Pre-Mix Bin Nos. 1 and 2 shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Raw Material Pre-Mix Bin Nos. 1 and 2	M-2280	0.60	2.54

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-258574]

C.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition C.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse M-2280) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC27-258574]

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.}

C.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

C.9. 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. Additionally, the process rate data (combined rate of transfer of raw material to Raw Material Pre-Mix Bin Nos. 1 and 2 in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C. ; Construction Permit No. AC27-258574]

C.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the Raw Material Pre-Mix Bin Nos. 1 and 2 baghouse dust control device (Baghouse M-2280) exhaust shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. C.7.}

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

Recordkeeping and Reporting Requirements

C.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

C.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Specific Conditions C.2. and C.9., the permittee shall maintain the following daily records for Raw Material Pre-Mix Bin Nos. 1 and 2.

a. The total hours of operation (operation is defined as any period when material is being transferred to Raw Material Pre-Mix Bin Nos. 1 or 2).
b. The total combined amount of material transferred to Raw Material Pre-Mix Bin Nos. 1 and 2, in tons.
c. The daily average process/transfer rate, in tons/hour, based on items a. and b. above.

Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-258574]

Other Requirements

C.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-008	Kiln No. 1 Blending Silo Nos. 1 and 2 (Baghouse F-17 & E-36) The Kiln No. 1 Blending Silos No. 1 (North) and No. 2 (South) blend raw materials from the two raw mills for use in the two cement kilns. Raw material is transferred pneumatically from Raw Mill No. 1 and/or Raw Mill No. 2 to Blending Silo Nos. 1 and 2 at a maximum combined transfer rate of 160 tons per hour. From Blending Silos Nos. 1 and 2, raw material is transferred pneumatically to the Kiln No. 1 North and South Feed Silos for transfer either to the Kiln No. 1 Feed Surge (Buffer) Bin (EU 002) or the Kiln No. 2 Blending Silo (EU 012). Particulate matter emissions from Blending Silo Nos. 1 and 2 are controlled by the following baghouse dust control device: a. Baghouse E-36 - This is a Western Precipitation Model PF-6012-90 Pulse Flow, 15,000 acfm (design air flow) baghouse dust control device. This baghouse is in service whenever material is being transferred to the silos from the No. 1 Raw Mill. b. Baghouse F-17 – This is a Flex-Kleen Model 100-WRW-80, 6,000 acfm (design air flow) baghouse dust control device. This baghouse is in service whenever material is being transferred to the silos from the No. 2 Raw Mill.
-012	Kiln No. 2 Blending Silo (No. 5 Blending Silo) (Baghouse G-11) The Kiln No. 2 Blending Silo (No. 5 Blending Silo) blends raw materials to be used in Kiln No. 2. Raw material is transferred pneumatically from Raw Mill No. 2 to the Kiln No. 2 Blending Silo at a maximum transfer rate of 165 tons per hour. The Kiln No. 2 Blending Silo can also be fed from the Kiln No. 1 Blending/Feed Silos (North and South, EU 008). Particulate matter emissions from the transfer operations are controlled by a Flex-Kleen Model 100-WMW-300, 23,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse G-11).

Federal Regulations

D.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800 and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

D.2. Permitted Capacity – The transfer of raw material to blending silo(s) shall not exceed the following:

EU ID No.	Description	Maximum Process Rate	Averaging Time	Basis
008	The total combined rate of transfer of raw material to Kiln No. 1 Blending Silo Nos. 1 and 2	160 tons/hour	Daily	Dry
012	The transfer of raw material to the Kiln No. 2 Blending Silo	165 tons/hour	Daily	Dry

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258565 and 0530010-005-AC]

D.3. Hours of Operation - These emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258565 and 0530010-005-AC]

D.4. 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.}

D.5. Visible Emissions Limitation - Visible emissions (VE) from EU No. 008 (Kiln No. 1 Blending Silo Nos. 1 and 2) and EU No. 012 (Kiln No 2. Blending Silo) shall not exceed the following limits:

EU ID No.	Source	Baghouse ID	% Opacity
008	Kiln 1 Blending Silo No. 1 (North)	F-17	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
	Kiln 1 Blending Silo No. 2 (South)	E-36	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
012	Kiln No. 2 Blending Silo	G-11	10%

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit Nos. AC27-258565, AC27-258566 and 0530010-030-AC (BART Project)]

D.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from shall not exceed the following levels:

EU ID No.	Source	Baghouse ID	Pounds/Hour	Tons/Year
008	Kiln 1 Blending Silo No. 1 (North)	F-17	1.45	6.35
	Kiln 1 Blending Silo No. 2 (South)	E-36	1.02	4.46
012	Kiln No. 2 Blending Silo	G-11	1.11	4.57

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258565, AC27-258566 and 0530010-030-AC (BART Project)]

D.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition D.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test (applies to Baghouses F-17, E-36 and G-11).
[Rule 62-297.620(4), F.A.C.; Construction Permit Nos. AC27-258565 and AC27-258566]

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.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

D.9. 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. Additionally, the process rate data for each EU (i.e., EU Nos. 008 & 012 raw material transfer rates, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit Nos. AC27-258565 and AC27-258566]

D.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), EU No. 008 baghouse exhausts (Baghouses E-36 and F-17) and EU No. 012 baghouse exhaust (Baghouse G-11) shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. D.7.}

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

Recordkeeping and Reporting Requirements

D.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

D.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Conditions D.2. and D.9., the permittee shall maintain the following daily records:

a. EU No. 008 (Blending Silo Nos. 1 and 2) Records.
   1. The total hours of operation (operation is defined as any period when raw material is being transferred to either Blending Silo Nos. 1 or 2).
   2. The total combined amount of material loaded (transferred) to Blending Silo Nos. 1 and 2 from Raw Mill Nos. 1 and 2, in tons.
   3. The daily average process/transfer rate, in tons/hour, based on items 1. and 2. above.

b. EU No. 012 (Kiln No. 2 Blending Silo) Records.
   1. The total hours of operation (operation is defined as any period when material is being transferred to the Kiln No. 2 Blending Silo).
   2. The total amount of material loaded (transferred) from Raw Mill No. 2 (or from Blending Silo Nos. 1 and 2) to the Kiln No. 2 Blending Silo, in tons.
   3. The daily average process/transfer rate, in tons/hour, based on items 1. and 2. above.

Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit Nos. AC27-258565 and AC27-258566]

Other Requirements

D.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

{Permitting Note – In this subsection (Subsection D), specific condition references to Construction Permit No. AC27-258565 apply to EU No. 008 and specific condition references to Construction Permit No. AC27-258566 apply to EU No. 012.}

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

EU ID No.	Brief Description
-002	Kiln No. 1 Feed System (Baghouse D-31) The Kiln No. 1 Feed System consists of a kiln feed surge bin (Kiln No. 1 Feed Surge (Buffer) Bin) and a kiln feed transfer system (air slide and bucket elevators) which transfers kiln feed raw material from the two Kiln No. 1 Feed Silos (North and South) to the Kiln No. 1 Feed Surge Bin at a maximum hourly transfer rate of 165 tons/hour. Particulate matter emissions from the transfer system and Kiln No. 1 Feed Surge (buffer) Bin are controlled by a Western Precipitation Model PF-6012-90 Pulse Flow, 10,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse D-31).
-013	Kiln No. 2 Feed System (Baghouse H-13) The Kiln No. 2 Feed System consists of a kiln feed surge bin (Kiln No. 2 Feed Surge (Buffer) Bin) and a kiln feed transfer system (air slide and bucket elevators) which transfers kiln feed raw material from the Kiln No. 2 Feed Silo to the Kiln No. 2 Surge (Buffer) Bin at a maximum hourly transfer rate of 165 tons/hour. Particulate emissions are controlled by a Flex-Kleen Model 100-WRW-80, 6,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse H-13).

Federal Regulations

E.1. Federal Rule Requirements - This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

E.2. Permitted Capacity:

a. Kiln No. 1 Feed System - The total rate of transfer of kiln feed raw material from the Kiln No. 1 Feed Silos (2) to the Kiln No. 1 Feed Surge (buffer) Bin shall not exceed either of the following rates.

EU No.	Maximum Rate	Averaging Time	Basis
002	165 tons/hour	hourly	Dry
	150 tons/hour	30 calendar-day rolling average	Dry

b. Kiln No. 2 Feed System - The total rate of transfer of kiln feed raw material from the Kiln No. 2 Feed Silo to the Kiln No. 2 Feed Surge (Buffer) Bin shall not exceed either of the following rates.

EU No.	Maximum Rate	Averaging Time	Basis
013	165 tons/hour	hourly	Dry
	150 tons/hour	30 calendar-day rolling average	Dry

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-005-AC]

E.3. Hours of Operation - These emissions units are permitted to operate continuously (i.e., 8,760 hours/year) [Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258567 and 0530010-005-AC]

E.4. 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.}

E.5. Visible Emissions (VE) Limitation - Visible emissions from the Kiln No. 1 and 2 Feed Systems shall not exceed the following.

EU No.	Source	Baghouse ID	% Opacity
002	Kiln No. 1 Feed System	D-31	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
013	Kiln No. 2 Feed System	H-13	10%

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-258567, AC27-258568 and 0530010-030-AC (Bart Project)]

E.6. Particulate Matter (PM) and VE Emissions Limitation - Particulate matter (PM) emissions from the Kiln No. 1 and 2 Feed Systems shall not exceed the following levels:

EU No.	Source	Baghouse ID	Pounds/Hour	Tons/Year
002	Kiln No. 1 Feed System	D-31	1.02	4.47
013	Kiln No. 2 Feed System	H-13	1.02	4.18

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-258567, AC27-258568, and 0530010-030-AC (Bart Project)]

E.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition E.6. Due to the expense and

complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouses D-31 and H13) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC53-258567 and AC27-258568]

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.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

E.9. 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. Additionally, the process rate data (Kiln Nos. 1 and 2 Feed System transfer rates, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

{Permitting Note - The permitted capacity for each Kiln Feed System (i.e., Kiln Nos. 1 & 2 Feed Systems) is 165 tons/hour. Requirements for Kiln No. 1 were established in Construction Permit No. AC27-258567 and requirements for Kiln No. 2 were established in initial Title V Permit No. 0530010-002-AV.}

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310, F.A.C.; Construction Permit No. AC27-258567]

E.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), this emissions unit shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. E.7.}

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

Recordkeeping and Reporting Requirements

E.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

E.12. Process Rate and Operating Hour Records - To demonstrate compliance with Specific Conditions E.2. and E.9., the permittee shall maintain the following hourly and daily records for each kiln feed system.

{Permitting Note - EU No. 002 is Kiln Feed System No. 1 and EU No. 013 is Kiln Feed System No. 2.}

Hourly Records

a. The total amount of kiln feed raw material transferred from the kiln feed silo(s) to the kiln feed surge bin, in tons/hour.

{Permitting Note - (EU No. 002)material transfers are from the two Kiln No. 1 Feed Silos to the Kiln No. 1 Feed Surge; (EU No. 013)material transfers are from the Kiln No. 2 Feed Silo to the Kiln No. 2 Feed Surge Bin.}

Daily Records

b. The total hours of operation for the day (operation is defined as any period when raw material is being transferred from the Kiln Feed Silo(s) to the Kiln Feed Surge (Buffer) Bin.

c. The total amount of kiln feed raw material transferred from the kiln feed silo(s) to the kiln feed surge bin for the day, in tons.

d. The daily average process/transfer rate, in tons/hour, based on items b. and c. above.

e. The total operating hours for the most recent 30 calendar days (hours/rolling 30 calendar days).

f. The total amount of kiln feed raw material transferred from the kiln feed silo(s) to the kiln feed surge (Buffer) bin for the most recent 30 calendar days (tons/rolling 30 calendar days).

g. The average process rate for the most recent 30 calendar days, based on items e. and f. above (rolling 30 calendar day average tons/hour).

Hourly records shall be completed within 24 hours. Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC53-258567 and AC27-258568]

Other Requirements

E.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

{Permitting Note – In this subsection (Subsection E), specific condition references to Construction Permit No. AC27-258567 apply to EU No. 002, specific condition references to Construction Permit No. AC27-258568 apply to EU No. 013 and specific condition references to Construction Permit No. 0530010-005-AC may apply to EU Nos. 002 and/or 013.}

The specific conditions in this section apply to the following emissions units (EUs):

EU ID No.	Brief Description
-003	Cement Kiln No. 1 (Baghouse E-55) Kiln No. 1 receives feed materials from the Kiln No. 1 Feed System (EU No. 002). Kiln No. 1 is a dry preheater process kiln employing the Polysius GEPOL preheater design. • Fuels - Kiln No. 1 is limited to a fuel heat input of 300 million British thermal units (MMBtu) per hour. Allowable fuels include: coal, Nos. 2, 3, 4, 5, and 6 fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. Kiln No. 1 is also permitted to fire whole tire derived fuel (WTDF) as a supplemental fuel. • Capacity - Kiln No. 1 operating rate is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour period, and a maximum annual limit of 1,300,000 TPY. • Emission Controls - Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO), and volatile organic compounds (VOC). Kiln No. 1 is also equipped with low-NO_x burners and a SNCR (Selective Non-Catalytic Reduction) system for additional NO_x control*. The SNCR systems consists of an aqueous ammonia tank, pumps, piping, compressed air delivery, injectors, control systems, and other ancillary equipment. Aqueous ammonia solution is injected at a location(s) in the preheater with an appropriate temperature profile to support the SNCR process. The system is operated to continuously meet the required NO_X emissions limits. *(* Compliance Assurance Monitoring (CAM) Applicability Note: CAM does not apply to the Selective Non-Catalytic Reduction (SNCR) NOx control system on Kiln No. 1 because the Kiln is equipped with NOx CEMS and therefore exempt from CAM. See 40 CFR 64.2(b)(1)(vi).)* Particulate matter (PM) emissions from Kiln No. 1 are controlled by a Fuller Draco Custom Baghouse, 315,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse E-55). Kiln No. 1 utilizes two cooling dampers (designated as 323 E and 323 N) on the existing Kiln No. 1 raw mill bypass duct system to cool the bypass gases in a manner that will minimize the formation of dioxin/furans (D/F) during periods of operation with the raw mill out of service. Damper 323 E is a fixed position damper. An automatic damper positioner on Damper 323 N makes adjustments based on the current baghouse inlet temperature to maintain the baghouse inlet temperature established during the most recent successful dioxin and furan (D/F) compliance test. Damper position is recorded on the programmable logic controller (PLC) in the control room. • Monitors: The Kiln 1 exhaust stack is equipped with continuous opacity monitoring system (COMS) to continuously monitor and record visible emissions; and continuous emission monitors (CEMS) to continuously monitor and record emissions of SO_2, CO and NO_X. 40 CFR 63, Subpart LLL also requires the installation of Mercury, HCL and THC CEMS, and a PM CPMS by the September 9, 2015. Baghouse inlet gas temperature is also measured and recorded by a temperature monitoring system.

EU ID No.	Brief Description
	• Exhaust Stack Parameters - The stack for Kiln No. 1 has the following characteristics: stack height is 150 feet, exit diameter is 13 feet, exit gas temperature is approximately 285 °F, and actual volumetric flow rate is approximately 315,000 acfm.
-004	Cement Plant Clinker Cooler No. 1 (Baghouse F-18) Clinker Cooler No. 1 is used to cool cement clinker from Kiln No. 1 (EU No. 003). The maximum clinker production rate is approximately 90 tons/hour (30-day rolling average basis). • Emission Controls - Particulate matter (PM) emissions from Clinker Cooler No. 1 are controlled by a Western Precipitation Model PF-6012-300, 170,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse F-18). • Monitors - The Clinker Cooler No. 1 exhaust stack is equipped with continuous opacity monitoring system (COMS) to continuously monitor and record visible emissions. 40 CFR 63, Subpart LLL also requires the installation of a PM CPMS by the September 9, 2015. • Exhaust Stack Parameters - The stack for Clinker Cooler No. 1 has the following characteristics: stack height is 77 feet, exit diameter is 7.5 feet, exit temperature is approximately 250 °F, and actual volumetric flow rate is approximately 116,000 acfm.
-014	Cement Kiln No. 2 (Baghouse E-19) Kiln No. 2 receives feed materials from the Kiln No. 2 Feed System (EU No. 013). Kiln No. 2 is a dry preheater process kiln employing the Polysius GEPOL preheater design. • Fuels - Kiln No. 2 is limited to a fuel heat input of 300 million British thermal units (MMBtu) per hour. Allowable fuels include: coal, Nos. 2, 3, 4, 5, and 6 fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. • Capacity - Kiln No. 2 operating rate is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour period, and a maximum annual limit of 1,300,000 TPY. • Emission Controls - Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO), and volatile organic compounds (VOC). Kiln No. 2 is also equipped with low-NO_x burners and a SNCR (Selective Non-Catalytic Reduction) system for additional NO_X control*. The SNCR systems consists of an aqueous ammonia tank, pumps, piping, compressed air delivery, injectors, control systems, and other ancillary equipment. Aqueous ammonia solution is injected at a location(s) in the preheater with an appropriate temperature profile to support the SNCR process. The system is operated to continuously meet the required NO_X emissions limits. *(* Compliance Assurance Monitoring (CAM) Applicability Note: CAM does not apply to the Selective Non-Catalytic Reduction (SNCR) NOx control system on Kiln No. 2 because the Kiln is equipped with NOx CEMS and therefore exempt from CAM. See 40 CFR 64.2(b)(1)(vi).)* Particulate matter (PM) emissions from Kiln No. 2 are controlled by by a Fuller Model 10744

EU ID No.	Brief Description
	Modular Baghouse, 315,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse E-19). • Monitors: The Kiln 2 exhaust stack is equipped with continuous opacity monitoring system (COMS) to continuously monitor and record visible emissions; and continuous emission monitors (CEMS) to continuously monitor and record emissions of CO and NO_X. 40 CFR 63, Subpart LLL also requires the installation of Mercury, HCL and THC CEMS, and a PM CPMS by the September 9, 2015. Baghouse inlet gas temperature is also measured and recorded by a temperature monitoring system. • Exhaust Stack Parameters - The stack for Kiln No. 2 has the following characteristics: stack height is 105 feet, exit diameter is 14 feet, exit gas temperature is approximately 250 °F, and actual volumetric flow rate is approximately 315,000 acfm.
-015	Cement Clinker Cooler No. 2 (Baghouse K-09) Clinker Cooler No. 2 is used to cool cement clinker from Kiln No. 2 (EU No. 014). The maximum clinker production rate is approximately 90 tons/hour (30-day rolling average basis). • Emission Controls - Particulate matter (PM) emissions from Clinker Cooler No. 2 are controlled by a Fuller Plenum Pulse No. 128 Type 20-Zone, 190,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse K-09). • Monitors - The Clinker Cooler No. 2 exhaust stack is equipped with continuous opacity monitoring system (COMS) to continuously monitor and record visible emissions. 40 CFR 63, Subpart LLL also requires the installation of a PM CPMS by the September 9, 2015 Exhaust Stack Parameters - The stack for Clinker Cooler No. 2 has the following characteristics: stack height is 90 feet, exit diameter is 9.7 feet, exit temperature is approximately 250 °F, and actual volumetric flow rate is approximately 116,000 acfm.

Federal Regulations

F.1. Federal Rule Requirements - This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (see Appendix NESHAP 40 CFR 63, Subpart LLL). The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.

Based on the definition in 40 CFR 63.1341 (Subpart LLL), Kiln Nos. 1 and 2 are defined as **in-line kiln/raw mill** systems.

[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

F.2. Permitted Capacity*:

a. Kiln No 1. - The maximum preheater raw material process feed rate to Kiln No. 1 shall not exceed any of the following rates.

EU No.	Maximum Raw Material Feed Rate	Averaging Time	Basis
003	165 tons/hour	Hourly (i.e., 1-hour maximum)	Dry (i.e., as fed)
	150 tons/hour	Rolling 30-operating day average	Dry (i.e., as fed)
	1,300,000 tons/yr	consecutive 12-month period	Dry (i.e., as fed)

b. Kiln No 2. - The maximum preheater raw material process feed rate to Kiln No. 2 shall not exceed any of the following rates.

EU No.	Maximum Raw Material Feed Rate	Averaging Time	Basis
014	165 tons/hour	Hourly (i.e., 1-hour maximum)	Dry (i.e., as fed)
	150 tons/hour	Rolling 30-operating day average	Dry (i.e., as fed)
	1,300,000 tons/yr	consecutive 12-month period	Dry (i.e., as fed)

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. 0530010-003-AC (PSD-FL-233) and 0530010-026-AC]

(Clinker Cooler Permitting Note - Clinker Cooler No. 1 is directly fed from Kiln No. 1. Clinker Cooler No. 2 is directly fed from Kiln No. 2. The Clinker Coolers do not operate independently of Kilns and therefore do not have separate maximum process rate limitation.)*

F.3. Hours of Operation - These emissions units may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-003-AC (PSD-FL-233)]

F.4. Permitted Fuels - The permittee is authorized to burn the following fuels in the kilns:

EU No.	Description	Authorized Fuels
003	Kiln No. 1.	- Natural gas - No. 6 or better grade fuel oil - On-specification, non-hazardous waste used oil or grease generated on-site - Coal - Whole tire-derived fuel (WTDF)
014	Kiln No. 2.	- Natural gas - No. 6 or better grade fuel oil - On-specification, non-hazardous waste used oil or grease generated on-site - Coal

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-003-AC (PSD-FL-233)]

F.5. Maximum Heat Input Rate - The maximum heat input rate to Cement Kiln No. 1 and 2 shall not exceed the following limits:

EU No.	Description	Maximum Heat Input Rate (on a daily average basis)
003	Kiln No. 1.	300 MMBtu/hour*
014	Kiln No. 2.	300 MMBtu/hour*

{ Permitting Note - This maximum permitted heat input rate represents approximately the following maximum firing rates for the fuel type and specified heating value heat listed:*

a. 24,000 pounds per hour of coal with a heating value of 12,500 Btu/lb;

b. 2,116 gallons/hour of No. 2 fuel oil with a heating value of 141,300 Btu/gal;

c. 2,060 gallons/hour of No. 4 fuel oil with a heating value of 145,600 Btu/gal;

d. 2,016 gallons/hour of No. 5 fuel oil with a heating value of 148,800 Btu/gal;

e. 1,982 gallons/hour of No. 6 fuel oil with a heating value of 151,300 Btu/gal;

f. 292,683 cubic feet/hour of natural gas with a heating value of 1,025 Btu per cubic foot.}

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-003-AC (PSD-FL-233)]

F.6. No. 6 or Better Grade Fuel Oil - When No. 6 fuel oil is specified in this permit, a better grade may be substituted instead. A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list.

Better Grade (from best down)

a. new, No. 2 fuel oil, or No. 2 on-specification fuel oil;

b. new, No. 3 fuel oil, or No. 3 on-specification fuel oil;

c. new, No. 4 fuel oil, or No. 4 on-specification fuel oil;

d. new, No. 5 fuel oil, or No. 5 on-specification fuel oil;

e. new, No. 6 fuel oil, or No. 6 on-specification fuel oil.

{Permitting Note - This condition was previously established in Initial Title V Operation Permit 0530010-002-AV.}

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

F.7. Used Oil Requirements - The permittee shall fire only on-specification *(see a. below)*, non-hazardous waste *(see b. below)* used oil or non-hazardous grease *(See b. and c. below)* that has been generated on-site.

a. On-Specification Used Oil - "On-specification" used oil is defined as used oil that meets all of the requirements below (from 40 CFR Part 279, Standards for the Management of Used Oil, PCB reference added) Used oil that does not meet all the requirements below or those in B. below is defined as "off-specification" used oil and shall not be burned.

Constituent/Property	Allowable
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum

Chromium*	10 ppm maximum
Lead	100 ppm maximum
Total Halogens **	1000**/4000 ppm maximum
Polychlorinated Biphenyls (PCB's)	less than 50 ppm
Flash Point	100° F minimum

* Chromium Note: Based on the analysis of samples, the Department considers the used oil/grease to be classified as an off-specification used oil for chromium. However, studies show that the low volatility of the metals, including chromium, and its extensive bonding in the clinker results in insignificant emissions for this element. The Permittee has provided assurances that emissions of this pollutant will not result in exceedances of air quality or ambient guidelines developed to protect human health and welfare.

** Total Halogens Note: Levels over 1000 ppm require additional testing (ref. 40 CFR 279.11).

b. Non-Hazardous Waste Used Oil and Grease - Used oil and grease burned at this facility (Kiln Nos. 1 and 2) shall not be a hazardous waste as defined by 40 CFR Part 261.3 or Rule 62-730.030, F.A.C. It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. These fuels shall be burned in compliance with Section 403.769(3), Florida Statutes.

c. Non-Hazardous Used Grease Usage Limitation - The total combined usage of non-hazardous waste grease used as a fuel in Kiln Nos. 1 and 2 shall be less than 5,000 gallons/year.

[Rules 62-4.070(3), 62-210.200 (Potential to Emit), 62-213.440(1), and 62-710.210, F.A.C.; 40 CFR 279.61; 40 CFR 761.20(e); Construction Permit No. 0530010-003-AC (PSD-FL-233)]

F.8. Whole Tire Derived Fuel (WTDF) Requirements (Kiln No.1) - Use of whole tire-derived fuel (WTDF) in Cement Kiln No. 1 shall meet the following requirements.

a. The maximum utilization/firing rate of WTDF shall not exceed 20 percent of the total Kiln No. 1 Btu heat input, nor 2.14 tons per hour, on a daily average basis.

b. WTDF shall be introduced to Kiln No. 1 only at a point at the base of the preheater (i.e., at the point of exit of gases from the kiln).

c. Firing of WTDF in Kiln No. 1 shall not commence, or be conducted, unless the cement kiln has reached an operating temperature of at least 1,400 ° F for one hour. The gas operating temperature shall be measured at the cement kiln exit.

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-240439 and 0530010-003-AC (PSD-FL-233)]

F.9. Testing or Use of Additional Fuels - Additional fuels other than those listed in Specific Condition F.4. cannot be trial burned or tested until the applicant applies for and obtains an air construction permit to conduct such tests. Such fuels cannot be fired on a permanent basis until the applicant applies for and obtains another air construction permit.
[Rules 62-4.070(3), and 62-210.300 (Permits Required), F.A.C.]

F.10. 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 times for Specific Condition No. **F.11.** are based on the specified averaging time of the applicable test method.

F.11. Emission Limitations

EU No.	Description	Pollutant	Emissions Limit	Basis/Notes
003	Kiln No. 1	PM/PM_{10} (4)	0.18 lb/ton dry kiln feed	Permit Nos. 0530010-003-AC (PSD-FL-233) and 0530010-030-AC (BART Project)
		PM(6)(7)	0.07 lb/ton clinker*	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		D/F(1)(8)	0.20 ng/dscm (8.7×10^{-11} grains/dscf)TEQ	40 CFR 63.1343 (Subpart LLL, versions 12/6/06 & 2/12/13)
		Mercury(6)(8)	55 lb/MM tons clinker	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		THC(5)(6)(8)	24 ppmvd	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		HCl(6)(8)	3 ppmvd	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		SO_2	0.10 lb/ton dry kiln feed	Permit Nos. AC27-258571 and 0530010-030-AC (BART Project)
		NO_x	1.21 lb/ton dry kiln feed	Permit Nos. 0530010-034-AC and 0530010-030-AC (BART Project)
		CO(3)	1.20 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		VOC (2)	0.09 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		Opacity(4)	10%	Permit Nos. 0530010-003-AC(PSD-FL-233) and 0530010-030-AC (BART Project)
004	Clinker Cooler No. 1	PM/PM_{10}(4)	0.09 lb/ton dry kiln feed	Construction Permit 0530010-003-AC (PSD-FL-233)
		PM(6)	0.07 lb/ton clinker*	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		Opacity(4)	10%	Permit Nos. 0530010-003-AC(PSD-FL-233) and 0530010-030-AC (BART Project)

EU No.	Description	Pollutant	Emissions Limit Units of the emissions limit	Basis/Notes
014	Kiln No. 2	PM/PM_{10}(4)	0.18 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		PM(6)(7)	0.07 lb/ton clinker*	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		D/F(1)(8)	0.20 ng/dscm (8.7×10^{-11} grains/dscf)TEQ	40 CFR 63.1343 (Subpart LLL, versions 12/6/06 & 2/12/13)
		Mercury(6)(8)	55 lb/MM tons clinker	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		THC(5)(6)(8)	24 ppmvd	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		HCl(6)(8)	3 ppmvd	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		SO_2	0.10 lb/ton dry kiln feed	Permit No. AC27-258571
		NO_x	1.21 lb/ton dry kiln feed	Permit No. 0530010-034-AC
		CO(3)	1.20 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		VOC (2)	0.09 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		Opacity(4)	10%	Permit 0530010-003-AC (PSD-FL-233)
015	Clinker Cooler No. 2	PM/PM_{10}(4)	0.09 lb/ton dry kiln feed	Permit No. 0530010-003-AC (PSD-FL-233)
		PM(6)(7)	0.07 lb/ton clinker*	40 CFR 63.1343 (Subpart LLL, version 2/12/13)
		Opacity(4)	10%	Permit 0530010-003-AC (PSD-FL-233)

(1) If the average temperature at the inlet to the first PM control device (fabric filter or electrostatic precipitator) during the D/F performance test is 400 °F or less this limit is changed to 0.40 ng/dscm (TEQ).

(2) In accordance with Construction Permit No. 0530010-003-AC/PSD-FL-233, VOC compliance testing was only required at the initial testing. However, if the allowable emissions indicated above are exceeded for CO, then the Department shall require VOC compliance testing to determine that the permittee is in compliance with the allowable VOC emission rate.

(3) Kiln Nos. 1 and 2 are also required to have a continuous emission monitoring system (CEMS) for CO, but the CEMS is not the specified method of demonstrating compliance for CO. (See Specific Condition No. F.40.)

(4) These PM/PM_{10} and opacity limits are effective until September 9, 2015 or until the facility certifies compliance with the new PM limit required by 40 CFR 63, Subpart LLL (version dated 2/12/2013), whichever comes first.

{Note: The new PM limits and monitoring methods in 40 CFR 63, Subpart LLL (version dated 2/12/2013) are more stringent and accurate than the PM/PM_{10} and opacity limits in previous permit for this facility. Also, PM CPMS compared to opacity monitoring is a more accurate method of demonstrating continuous compliance with the PM limits of the kilns and clinker coolers.}

(5) Any source subject to the 24 ppmvd THC limit may elect to meet an alternative limit of 12 ppmvd total organic HAP.

(6) The new emissions limits for PM, mercury and THC (required by 40 CFR 63 Subpart LLL version dated 2/12/2013) become effective on September 9, 2015 or when the facility certifies compliance with the new limit, whichever comes first.

(7) The PM limits in Subpart LLL are more stringent than the previous PM limits specified in Permit No. 0530010-003-AC (PSD-FL-233).

(8) All D/F, HCl, and total hydrocarbon (THC) emissions limit are on a dry basis. The D/F, HCl, and THC limits for kilns are corrected to 7 percent oxygen. All THC emissions limits are measured as propane. Standards for mercury and THC are based on a rolling 30-day average. If using a CEMS to determine compliance with the HCl standard, this standard is based on a rolling 30-day average. You must ensure appropriate corrections for moisture are made when measuring flow rates used to calculate mercury emissions. The 30-day period means 30 consecutive kiln operating days excluding periods of startup and shutdown.

{<u>Permitting Note</u>: 1.65 = The conversion factor of ton feed per ton clinker. See 40 CFR 63.13431(b)(2)}*

[Rules 62-204.800(11)(b), 62-210.200 (Potential to Emit) and 62-212.400 (PSD BACT), F.A.C.; Construction Permit Nos. AC27-258571, 0530010-003-AC/PSD-FL-233, 0530010-034-AC and 0530010-30-AC (BART Project); 40 CFR 63 (Subpart LLL versions dated 12/20/2006 & 2/12/2013)]

<u>Operating Requirements</u>

F.12. <u>Kiln Temperature Operating limits</u> **-** The in-line kiln/raw mill (subject to a D/F emissions limitation) shall be operated, such that:

a. When the raw mill of the **<u>in-line kiln/raw mill is operating</u>**, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in item c. of this specific condition and established during the performance test when the raw mill was operating, is not exceeded, except during periods of startup and shutdown when the temperature limit may be exceeded by no more than 10 percent.

b. When the raw mill of the **<u>in-line kiln/raw mill is not operating</u>**, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in item c. of this specific condition and established during the performance test when the raw mill was not operating, is not exceeded, except during periods of startup/shutdown when the temperature limit may be exceeded by no more than 10 percent.

c. The temperature limit for the in-line kiln/raw mill is determined in accordance with § 40 CFR 63.1349(b)(3)(iv) as follows:

The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with 40 CFR 63.1344(b).

{<u>Permitting Note</u> - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1346(a) and (b) (Subpart LLL, version dated 2/12/2013)]

F.13. Raw Material & Fuel Limitations - No kiln may use as a raw material or fuel any fly ash where the mercury content of the fly ash has been increased through the use of activated carbon, or any other sorbent, unless the facility can demonstrate that the use of that fly ash will not result in an increase in mercury emissions over baseline emissions (i.e., emissions not using the fly ash). The facility has the burden of proving there has been no emissions increase over baseline. Once the kiln is in compliance with a mercury emissions limit specified in 40 CFR 63.1343 Subpart LLL version dated 2/12/2013, this condition no longer applies.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1346(f) (Subpart LLL, version dated 2/12/2013)]

F.14. Startup and Shutdown Requirements - During periods of startup and shutdown the permittee must meet the following requirements:

a. During startup you must use any one or combination of the following clean fuels: natural gas, synthetic natural gas, propane, distillate oil, synthesis gas (syngas), and ultra-low sulfur diesel (ULSD) until the kiln reaches a temperature of 1200 degrees Fahrenheit.

b. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.

c. All air pollution control devices must be turned on and operating prior to combusting any fuel.

d. You must keep records as specified in 40 CFR 63.1355 (Subpart LLL) during periods of startup and shutdown.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1346(g) (Subpart LLL, version dated 2/12/2013)]

F.15. Ammonia Injection - Ammonia shall be injected through the SNCR (Selective Non-Catalytic Reduction) System at a rate sufficient to continuously meet the NO_X emission limits of this permit. The concentration of stored ammonia solutions shall be less than 20 percent (%) by weight*.
[Rule 62-4.070, F.A.C.; Construction Permit No. 0530010-026-AC]

(Permitting Note - The stored ammonia concentration limitation avoids the requirement to prepare a Risk Management Plan pursuant to Section 112r of the Clean Air Act for this activity.)*

F.16. Circumvention of Control Equipment - The permittee shall not circumvent any air pollution control device or allow the emissions of air pollutants without the applicable air pollution control device (i.e., Kiln No. 1 and Clinker Cooler No.1 baghouse dust control devices (E-55 and F-18), Kiln No.1 SNCR NOx control system, Kiln No. 1 D/F raw mill bypass duct dampers, Kiln No. 2 and Clinker Cooler No.2 baghouse dust control devices (E-19 and K-09) and Kiln No.2 SNCR NOx control system) in service and operating properly.
[Rule 62-210.650, F.A.C.]

F.17. Good Operating and Combustion Practices - Operating procedures shall include good (proper) combustion practices and proper training of all operators and supervisors. The training shall include methods for minimizing excess emissions. The Best Available Control Technology (BACT) determinations for CO and VOC for this kiln rely on "proper combustion Practices" (CO) and "good combustion practices" (VOC) to reduce emissions. The good (proper) combustion practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including

supervisors) of air pollution control devices shall be properly trained in operation of the plant specific equipment.
[Rule 62-4.070(3), F.A.C.; Construction Permit No. 0530010-003-AC/PSD-FL-233]

F.18. Compliance Plan (Appendix CP-1) - Appendix CP-1, Compliance Plan, is a part of this permit. This compliance plan includes restrictions on the operation of Kiln No. 2 when the raw mill is out of service and a requirement to install an evaporative cooling system spray tower. This compliance plan also includes requirements for installing SO_2 CEMS on Kiln No. 1.
[Rule 62-213.440(2), F.A.C.]

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.19. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5 & 5I	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM_{10}.)
6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources *{Note: The method shall be based on a continuous sampling train.}*
18	Measurement of gaseous organic compound emissions by gas chromatography
23	Determination of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans From Stationary Sources
25A	Method for Determining Gaseous Organic Concentrations (Flame Ionization)
29	Determination of metals emissions from stationary sources
30B	Determination of Total Vapor Phase Mercury Emissions From Coal-Fired Combustion Sources Using Carbon Sorbent Traps

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 62-204.800 and 62-297.401, F.A.C.; Appendix A of 40 CFR 60]

F.20. Additional Test Methods

Method	Description of Method and Comments
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy

The above methods are described in 40 CFR 63, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800, F.A.C., Appendix A of 40 CFR 63]

F.21. 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. In addition to the common testing requirements and procedures specified in Appendix TR, the permittee shall also comply with the following requirements.

a. Required Fuels During Testing :

- Testing of emissions from Kiln 1 shall be conducted while burning coal and WTDF (at 20% of heat input)
- Testing of emissions from Kiln 2 shall be conducted while burning coal

b. Operation Rate During Testing: Compliance testing of emissions from the Kilns and/or Clinker Cooler should be conducted while operating within 90-100% of the maximum permitted hourly kiln feed rate, if feasible.

- The permitted capacity for the Kiln No. 1 Feed System is 165 tons/hour.
- The permitted capacity for the Kiln No. 2 Feed System is 165 tons/hour.

If it is impracticable to test at this rate, the emissions unit may be tested at less than the maximum permitted process rate; in this case, subsequent emissions unit operation is limited to 110 percent of the test process rate until a new compliance test is conducted. Once the unit is so limited, operation at higher process rates is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to gain the authority to operate at a higher process rate, not to exceed the maximum permitted process rates of Specific Condition No. F.2.

c. Test Report Requirements: The process rate data (kiln raw material feed rates, in tons/hour, dry basis) shall be monitored during each compliance test and shall be included in each emissions test report. Suitable methods shall be used to determine the kiln raw material feed rate (P), except fuels, for each run. Material balance over the production system shall be used to confirm the feed rate. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rule 62-297.310, F.A.C; Construction Permit Nos. 0530010-003-AC/PSD-FL-233, 0530010-022-AC, 0530010-026-AC and 0530010-034-AC]

F.22. Initial Performance Test Requirements – The permittee shall comply with the initial performance test requirements of 40 CFR 63, Subpart LLL (version dated 2/12/2013) which has a compliance date of September 9, 2015 for existing sources. The initial performance test requirements are briefly summarized in the table below. The permittee has the option of performing the initial performance test earlier than the compliance date if desired.

EU No. - Description	Emissions Standards	Performance Test Requirement
003 - Kiln No. 1 014 - Kiln No. 2 004 - Clinker Cooler No. 1 015 - Clinker Cooler No. 2	PM	See 40 CFR 63.1348(a)(1) & 40 CFR 63.1349(b)(1) *Performance test must be conducted using Method 5 or Method 5I of 40 CFR 60, Appendix A*
003 - Kiln No. 1 014 - Kiln No. 2	Mercury	See 40 CFR 63.1348(a)(5) & 40 CFR 63.1349(b)(5) *To demonstrate initial compliance with the mercury standard, the mercury CEMS or sorbent trap monitoring system must be operated in accordance with the requirements of 40 CFR 63.1350(k). Compliance with the mercury standard must be determined based on the first 30 days the facility operates the mercury CEMS or sorbent trap monitoring system after the compliance date.*
003 - Kiln No. 1 014 - Kiln No. 2	THC Or Total Organic HAP	See 40 CFR 63.1348(a)(4) & 40 CFR 63.1349(b)(4) - *To demonstrate initial compliance with the THC standard, the THC CEMS must be operated in accordance with the requirements of 40 CFR 63.1350(i).* 40 CFR 63.1349(b)(7) – *To demonstrate initial compliance with the Total Organic HAP standard, performance tests must be conducted using Method 320 of 40 CFR 63, Appendix A, Method 18 of 40 CFR 60, Appendix A, ASTM D6348-03 or a combination to determine emissions. Site specific THC emissions limits must also be determined by operating the THC CEMS in accordance with the requirements in 40 CFR 63.1350(j).*
003 - Kiln No. 1 014 - Kiln No. 2	HCl	See 40 CFR 63.1348(a)(6) & 40 CFR 63.1349(b)(6)(ii) *To demonstrate initial compliance with the HCl standard, the HCl CEMS must be operated in accordance with the requirements of 40 CFR 63.1350(l)(1). The initial compliance test must be based on the 30 kiln operating days that occur after the compliance date.*

[Rules 62-4.070(3) and 62-297.310(7)(a)1., F.A.C., 40 CFR 63.1348(a), 63.1349 and 63.1350 (Subpart LLL, version dated 2/12/2013)]

F.23. Performance Test (30 month frequency) Required - Except for pollutants where that specific pollutant is monitored using CEMS, each emissions unit in the table must be tested every 30 months to demonstrate compliance with the corresponding emissions standard.

EU No. - Description	Emissions Standards
003 - Kiln No. 1 & 014 - Kiln No. 2	Dioxin/Furans (D/F)
	Total Organic HAP

[Chapter 62-297, F.A.C.; Rule 62-204.800(11), F.A.C.; 40 CFR 63.1349(c) (Subpart LLL, version dated 2/12/2013)]

F.24. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards listed in the table below:

EU No.	Description	Emissions Standards
003	Kiln No. 1	PM/PM_{10}, CO
004	Clinker Cooler No. 1	PM/PM_{10}
014	Kiln No. 2	PM/PM_{10}, CO, SO_2
015	Clinker Cooler No. 2	PM/PM_{10}

[Rule 62-297.310(7), F.A.C.; 40 CFR 63.1349 (Subpart LLL versions dated 12/20/2006 & 2/12/2013) and Construction Permit Nos. 0530010-003-AC/PSD-FL-233, 0530010-022-AC, 0530010-026-AC and 0530010-034-AC]

F.25. Supplemental Dioxin/Furan and PM/ PM_{10} Tests - In accordance with the requirements of 40 CFR 63.1349(e), additional D/F and or PM/PM_{10} compliance tests shall be conducted if the source changes operations that may adversely affect compliance with the D/F or PM/PM_{10} standards. The owner or operator shall notify the Air Program of the Southwest District Office of the Department (Compliance Authority) prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for dioxin/furan (D/F) or PM/PM_{10}. For purposes of this condition, significant means any of the following:

a. a physical or chemical change in the 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/PM_{10} emission limits);
b. the use of a raw material not previously used;
c. a change in the LOI (loss on ignition) of the coal ash;
d. a change between non-beneficiated coal ash and beneficiated coal ash.

The notification shall include an analysis of the effect of the FINAL change on D/F and PM/ PM_{10} emission rates. Based on the information provided, the Compliance Authority will promptly determine if performance testing conducted in accordance with 40 CFR 63.1349(e) (Subpart LLL) will be required for the new feed or fuel. *(See also Specific Condition F.54.)*

{Permitting Note - This condition is effective until September 9, 2015 or until the facility certifies compliance with the new Dioxin/Furan and PM limit required by 40 CFR 63 Subpart LLL (version dated

*2/12/2013), whichever comes first. Specific Condition No. F.26. "*Supplemental Performance Test (Changes in operations) "*will supersede this condition.}*

[Rules 62-4.070(3), and 62-204.800(11)(b) F.A.C.; 40 CFR 63.1349(e) (Subpart LLL version dated 12/20/2006); Construction Permit No. 0530010-026-AC]

F.26. Supplemental Performance Test (Changes in operations) - In accordance with the requirements of 40 CFR 63.1348(c) (Subpart LLL version dated 2/12/2013):

a. If you plan to undertake a change in operations that may adversely affect compliance with an applicable standard, operating limit, or parametric monitoring value under this subpart, the source must conduct a performance test as specified in 40 CFR 63.1349(b).

b. In preparation for and while conducting a performance test required in § 63.1349(b), you may operate under the planned operational change conditions for a period not to exceed 360 hours, provided that the conditions in 40 CFR 63.1348 (c)(2)(i) through (c)(2)(iv) are met. You must submit temperature and other monitoring data that are recorded during the pretest operations.

- 40 CFR 63.1348(c)(2)(i) You must provide the Administrator written notice at least 60 days prior to undertaking an operational change that may adversely affect compliance with an applicable standard under this subpart for any source, or as soon as practicable where 60 days advance notice is not feasible. Notice provided under this paragraph must include a description of the planned change, the emissions standards that may be affected by the change, and a schedule for completion of the performance test required under paragraph (c)(1) of this section, including when the planned operational change period would begin.
- 40 CFR 63.1348(c)(2)(ii) The performance test results must be documented in a test report according to § 63.1349(a).
- 40 CFR 63.1348(c)(2)(iii) A test plan must be made available to the Administrator prior to performance testing, if requested.
- 40 CFR 63.1348(c)(2)(iv) The performance test must be completed within 360 hours after the planned operational change period begins.

[Rules 62-4.070(3), and 62-204.800(11)(b) F.A.C.; 40 CFR 63.1348(c) (Subpart LLL version dated 2/12/2013)]

F.27. Determination of Particulate Matter (PM/PM10) Emission Rate - Compliance with the Kiln and Clinker Cooler particulate matter (PM/PM_{10}) standards (0.18 lb/ton dry kiln feed) contained in Specific Condition F.11. shall be determined using EPA Method 5. In accordance with 40 CFR 63.1349(b)(1)(iii) (Subpart LLL version dated 12/20/2006), the emission rate (E) of particulate matter shall be computed for each run using the following equation (Eq. 1):

$E = (c_s \times Q_{sd})/(P \times K)$ (Eq. 1)

where:

E	=	emission rate of particulate matter, kg/metric ton (lb/ton) of kiln feed,
c_s	=	concentration of particulate matter, g/dscm (g/dscf),
Q_{sd}	=	volumetric flow rate of effluent gas, dscm/hr (dscf/hr),
P	=	total kiln feed (dry basis) rate, metric ton/hr (ton/hr),
K	=	conversion factor, 1000 g/kg (453.6 g/lb)

The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30.0 dscf). The average of three runs shall be used to determine compliance.

{Permitting Note - This condition is effective until September 9, 2015 or until the facility certifies compliance with the new PM limit required by 40 CFR 63 Subpart LLL (version dated 2/12/2013), whichever comes first.}

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1349(b)(1) (Subpart LLL version dated 12/20/2006)]

F.28. Raw Mill Operating Mode Requirements for Kiln PM/PM_{10} and D/F Compliance Testing - In accordance with the requirements of 40 CFR 63.1349(b) (1) and (3) (Subpart LLL), PM/PM10 and D/F compliance testing must be conducted during both raw mill in service (online/ operating) and raw mill out of service (off-line/not operating) operating modes*.

- This operation mode requirement must be satisfied for Raw Mill No. 1 during the PM/PM_{10} and D/F Compliance Testing for Kiln No. 1.
- This operation mode requirement must be satisfied for Raw Mill No. 2 during the PM/PM_{10} and D/F Compliance Testing Kiln No. 2*.

(Kiln 2 D/F Testing Mode Note: Testing in the Raw Mill Off-line mode is not required if the kiln is not allowed to operate in that mode of operation (see Appendix CP-1, Compliance Plan).)*

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1348(a)(3) (Subpart LLL version dated 2/12/2013)]

F.29. Additional Kiln Test Report Information Requirements - All kiln stack test reports must include raw material mix used during compliance test (including source and LOI and chloride content of fly ash). All stack test reports must include the status of operation of the SNCR system, including the rate of injection of ammonia.
[Rules 62-4.070(3), and 62-297.310(8), F.A.C.]

Continuous Monitoring Requirements

F.30. Continuous Monitoring Systems Summary

EU No.	Description	Continuous Monitoring Systems (CMS)	Continuous Compliance (Basic Data Requirements)
003	Kiln No. 1	SO_2 CEMS	- all valid hourly averages - 24-operating hour rolling average basis *(See Appendix SO_2 CEMS)*
003 & 014	Kiln Nos. 1 & 2	COMS(1)	- 6-minute average opacity for any 6-minute block period *(See 40 CFR 63.1350(c)(3) ver. 12/21/06)*
		NOx CEMS(2)	- all valid hourly averages - rolling 30-operating day average *(See Specific Condition No. F.39.)*
		CO CEMS(8)	- all valid hourly averages *(Note: CO CEMS is required but is not the specified method of demonstrating compliance for CO. See Specific Condition Nos. F.11., F.24. & F.40)*
		PM CPMS(6)	- all valid hourly averages - rolling 30-operating day average. *(See 40 CFR 63.1350(b)ver. 2/12/13)*
		Exhaust Gas Temperature CMS(7) *(Note: Required for D/F Monitoring)*	- required minimum data collection frequency must be one minute - rolling three-hour average temperature using the average of 180 successive one-minute average temperatures *(See 40 CFR 63.1350(g)ver. 2/12/13)*
		Mercury CEMS or Sorbent Trap CEMS(3)	- all valid hourly averages - rolling 30-operating day average *(See 40 CFR 63.1343 ver. 2/12/2013)*
		HCl CEMS(4)	- all valid hourly averages - rolling 30-operating day average *(See 40 CFR 63.1343 ver. 2/12/2013)*
		THC CEMS(5)	- all valid hourly averages - rolling 30-operating day average *(See 40 CFR 63.1343 ver. 2/12/2013)*
004 & 015	Clinker Cooler Nos. 1 & 2	COMS(1)	- 6-minute average opacity for any 6-minute block period *(See 40 CFR 63.1350(d)(3) ver. 12/21/06)*
		PM CPMS(6)	- all valid hourly averages - 30 operating day rolling average basis. *(See 40 CFR 63.1350(b)(ii) ver. 2/12/13)*

(1) Kiln Nos. 1 & 2 and Clinker Cooler Nos. 1 & 2 are required to monitor visible emissions/opacity with a continuous opacity monitoring system (COMS). *(See Specific Condition No. F.31.)*

Note: This monitoring requirement is effective until September 9, 2015 or until the facility certifies compliance with the new PM limit required by 40 CFR 63 Subpart LLL (version dated 2/12/2013), whichever comes first.

(2) Kiln Nos. 1& 2 are required to have a continuous emission monitoring system (CEMS) for NOx. Compliance with the NOx limitation is determined on a rolling 30-operating day basis based on the NOx CEMS data. *(See Specific Condition No. F.39.)*

(3) Mercury CEMS is required by September 9, 2015. *(See 40 CFR 63.1348(a)(5))*

(4) HCl CEMS is required for sources not equipped with wet scrubber, tray tower or dry scrubber. *(See 40 CFR 63.1349(b)(6)(ii)(A)).*

(5) THC CEMS is required by September 9, 2015. *(See 40 CFR 63.1350(b)(4)(i) & (j) & (m)(1) through (m)(4))*

(6) PM CPMS is required by September 9, 2015. *(See 40 CFR 63.1350(b))*

(7) D/F monitoring requirement (See 40 CFR 63.1350(g))

(8) Kiln Nos. 1 and 2 are required to have a continuous emission monitoring system (CEMS) for CO, but the CEMS is not the specified method of demonstrating compliance for CO. *(See Specific Condition Nos. F.11. F.24. and F.40.)*

[Rule 62-297.310(7), F.A.C.; 40 CFR 63.1349 (Subpart LLL, version dated 2/12/2013) and Construction Permit Nos. 0530010-003-AC/PSD-FL-233, 0530010-022-AC, 0530010-026-AC and 0530010-034-AC]

F.31. Continuous Opacity Monitoring Systems (COMS) for Kiln Nos. 1 & 2 and Clinker Cooler Nos 1 & 2 - The permittee shall install, calibrate, maintain, and continuously operate a continuous opacity monitoring system (COMS) to measure and record the opacity of emissions from the following emissions sources in a manner sufficient to demonstrate continuous compliance with the opacity standards specified in this permit.

EU No.	Description
003	Kiln No 1. control device exhaust stack (Baghouse E-55)
004	Clinker Cooler No. 1 control device exhaust stack (Baghouse F-18)
014	Kiln No 2. control device exhaust stack (Baghouse E-19)
015	Clinker Cooler No. 2 control device exhaust stack (Baghouse K-09)

a. The COMS shall be installed, maintained, calibrated, and operated as required by 40 CFR 63.1350(c) and (d) (Subpart LLL); 40 CFR 63.8 and 63.10 (Subpart A); and certified according to 40 CFR 60, Appendix B Performance Specification 1 (PS-1).

b. Recordkeeping and reporting related to the COMS data shall be in accordance with 40 CFR 63.1354 and 63.1355 (Subpart LLL), and 40 CFR 63.10 (Subpart A).

{Permitting Note - This condition is effective until September 9, 2015 or until the facility certifies compliance with the new PM limit required by 40 CFR 63 Subpart LLL (version dated 2/12/2013), whichever comes first.}

[Rules 62-204.800(8)(e), and 62-204.800(11)(b) & (d), F.A.C.; 40 CFR 60, Appendix B; 40 CFR 63.1349((b)(1)(v) and 63.1350 (c)(1) & (d)(1) (Subpart LLL version dated 12/20/2006); 40 CFR 63.8 and 63.10 (Subpart A)]

F.32. SO_2 CEMS for Kiln Nos. 1 - A sulfur dioxide (SO_2) continuous emission monitoring system (CEMS) shall be installed, operated, calibrated and maintained to measure and record the emissions of SO_2 in a manner sufficient to demonstrate continuous compliance with the SO_2 emission limits for this kiln. The SO_2 CEMS shall meet all applicable requirements specified in Appendix SO_2 CEMS.

{Permitting Note - At the time this permit was issued, set-up of the SO_2 CEMS was not completed. Set-up will be completed according to the compliance plan upon start-up. See Appendix CP-1, Compliance Plan for details.}

[Permit No. 0530010-030-AC (BART Project)]

F.33. Mercury CEMS or Sorbent Trap based CEMS – To demonstrate compliance with the mercury emissions standard, the permittee shall install and operate a mercury continuous emissions monitoring system (Hg CEMS) in accordance with Performance Specification 12A (PS 12A) of appendix B of 40 CFR 60 or an integrated sorbent trap monitoring system in accordance with Performance Specification 12B (PS 12B) of Appendix B of 40 CFR 60. The permittee shall monitor mercury continuously according to 40 CFR 63.1350 (k)(1) through (5) of Subpart LLL. The permittee must also develop an emissions monitoring plan in accordance with 40 CFR 63.1350 (p)(1) through (4) of Subpart LLL.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(7), 63.1350(k) & 63.1350(p) (Subpart LLL, version dated 2/12/2013)]

F.34. HCl CEMS - To demonstrate compliance with the HCl emissions standard, the permittee must monitor HCl emissions continuously according to 40 CFR 63.1350(l)(1) or (2) and 40 CFR 63.1350 (m)(1) through (4) of Subpart LLL, if the kiln is controlled using a wet or dry scrubber or tray tower, the permittee alternatively may parametrically monitor SO_2 emissions continuously according to 40 CFR 63.1350 (l)(3) of Subpart LLL. The permittee must also develop an emissions monitoring plan in accordance with 40 CFR 63.1350 (p)(1) through (4) Subpart LLL.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(8), 63.1350(l)(1),(l)(2) & 63.1350(m)(1) through (4) (Subpart LLL, version dated 2/12/2013)]

F.35. THC CEMS - To demonstrate compliance with the THC emissions standard, the permittee must comply with the monitoring requirements of 40 CFR 63.1350 (i)(1) and (i)(2) and 40 CFR 63.1350 (m)(1) through (m)(4) of Subpart LLL. The permittee must also develop an emissions monitoring plan in accordance with 40 CFR 63.1350 (p)(1) through (p)(4) of Subpart LLL.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(6), 63.1350(i)(1), (i)(2) & 63.1350(m)(1) through (4) & 63.1350 (p)(1) through (p)(4) (Subpart LLL, version dated 2/12/2013)]

F.36. Total Organic HAP Monitoring. If the permittee elects to demonstrate compliance with the alternative limit total organic HAP in lieu of the THC emissions limit, the permittee must continuously monitor THC according to 40 CFR 63.1350 (i)(1) and (2) or in accordance with Performance Specification 15 of Appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of Subpart LLL. The permittee must operate and maintain each CEMS according to the quality assurance requirements in Procedure 1 of Appendix F or 40 CFR 60. In addition, the permittee must follow the monitoring requirements in 40 CFR 63.1350(m)(1) through (m)(4) of Subpart LLL. The permittee must also develop an emissions monitoring plan in accordance with 40 CFR 63.1350(p)(1) through (p)(4) of Subpart LLL.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(6), 63.1350(i)(1), (i)(2) & 63.1350(m)(1) through (4) & 63.1350 (p)(1) through (p)(4) (Subpart LLL, version dated 2/12/2013)]

F.37. PM CPMS – A PM Continuous Parameter Monitoring System (CPMS) will be used to establish a site-specific operating limit corresponding to the results of the performance test demonstrating compliance with the PM Standard established in 40 CFR 63 Subpart LLL (version dated 2/12/2013). The permittee

will conduct performance tests using Method 5 or Method 5I at Appendix A-3 of 40 CFR 60. The permittee will use the PM CPMS to demonstrate continuous compliance with this operating limit. The permittee shall repeat the performance test annually and reassess and adjust the site-specific operating limit in accordance with the results of the performance test using the procedures in 40 CFR 63.1349(b)(1)(i) through (vi) Subpart LLL. The permittee must also repeat the test if the analytical range of the instrument is changed, or if the instrument itself or any principle analytical component of the instrument that would alter the relationship of output signal to in-stack PM concentration is replaced.

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(2), 63.1350(b) (Subpart LLL, version dated 2/12/2013)]

F.38. Clinker Production Monitoring – Because the Kilns are subject to limitations on mercury emissions (lb/MM tons of clinker), hourly production rates of clinker shall be determined according to the requirements of 40 CFR 63.1350(d). Hourly clinker production shall be determined by one of two methods:

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

{Permitting Note - The compliance date for this requirement is September 9, 2015}

[40 CFR 63.1348(b)(1)(iv), 63.1350(d) (Subpart LLL, version dated 2/12/2013)]

F.39. NO_X CEMS for Kiln Nos. 1 and 2

a. A nitrogen oxides (NOx) continuous emission monitoring system (CEMS) shall be installed, operated, calibrated and maintained to measure and record the emissions of NO_X in the following kiln exhaust stacks in a manner sufficient to demonstrate continuous compliance with the NOx emission limits for this kiln.

EU No.	Description
003	Kiln No 1. exhaust stack
014	Kiln No 2. exhaust stack

1. The NO_X CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 (PS-2), and Performance Specification 6 as a monitoring system.
2. The NO_X monitors' span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.
3. The CEMS shall be continuously operated to meet the quality assurance requirements of 40 CFR 60, Appendix F.

b. Data Requirements - The NO_X CEMS shall be installed, calibrated, maintained, and operated in a manner sufficient to express results in units of pounds per ton of preheater feed, pounds per ton of clinker produced, pounds per hour, and ppmvd (parts per million dry volume). The NOx CEMS shall meet the following data requirements.

1. 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.
2. Hours during which there is no kiln feed and no fuel fired are not valid hours.
3. 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).
4. 30-day Rolling Averages - Compliance with the emission limits for NO_X shall be based on a 30-operating 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 computing these emission limits, an operating day is any day that the kiln produces clinker or fires fuel.
5. 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 Specific Condition No. F.53. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
6. Availability - Monitor availability for each CEMS used to demonstrate compliance 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 Assurance Program of the Southwest District Office of the Department. All CEMS data shall be available to the Department, upon request, in an electronic format.

[Rules 62-4.070(3), 62-204.800(8)(e), F.A.C.; 40 CFR Part 60, Appendix B and Appendix F; Construction Permit Nos. 0530010-022-AC and 0530010-026-AC]

F.40. CO CEMS for Kiln Nos. 1 & 2

a. A carbon monoxide (CO) continuous emission monitoring system (CEMS) shall be installed, operated, calibrated and maintained to measure and record emissions of carbon monoxide (CO) in the following kiln exhaust stacks in a manner consistent with the CO emission limits for the kiln.

EU No.	Description
003	Kiln No 1. exhaust stack
014	Kiln No 2. exhaust stack

1. The CO CEMS shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4/4A, and Performance Specification 6 as a monitoring system.
2. The CO CEMS monitor span values shall be set appropriately, considering the expected range of emissions.
3. The CEMS shall be continuously operated to meet the quality assurance requirements of 40 CFR 60, Appendix F.

b. CO CEMS Data Requirements - The CO CEMS shall express the results in 1-hour averages in units of pounds per ton of dry kiln feed, pounds per ton of clinker produced, pounds per hour, and ppmvd (parts per million dry volume). The CO CEMS shall meet the following data requirements.

1. 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).
2. 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
3. CO CEMS Data Availability - All CO CEMS data shall be available to the Department, upon request, in an electronic format.

{Permitting Note - Kiln Nos. 1 and 2 are required to have a continuous emission monitoring system (CEMS) for CO, but the CEMS is not the specified method of demonstrating compliance for CO. (See Specific Condition F.11. & F.24).}

[Rules 62-4.070(3), 62-204.800(8)(e), F.A.C.; 40 CFR Part 60, Appendix B and Appendix F; Construction Permit Nos. 0530010-022-AC]

F.41. Exhaust Gas Moisture Correction - When needed to determine concentration on a dry basis, the owner or operator shall install a system to determine the moisture content of the exhaust gas and develop an algorithm to enable correction of the monitoring results to a dry basis (0% moisture).
[Rules 62-4.070(3), F.A.C.; Construction Permit Nos. 0530010-022-AC and 0530010-026-AC]

F.42. Kiln No. 1 and 2 Continuous Flow Monitor - A continuous flow monitor shall be installed in the Kiln No. 1 stack and in the Kiln No 2 stack to determine the stack exhaust flow rate to be used in determining mass emission rates for SO_2 (in Kiln No. 1), NOx and CO. The flow monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6 as a monitoring system with theSO_2, CO and NOx

CEMS. The flow monitor shall be continuously operated to meet the quality assurance requirements of 40 CFR 60, Appendix F.
[Rules 62-4.070(3), 62-204.800(8)(e), F.A.C.; 40 CFR Part 60, Appendix B and Appendix F; Construction Permit Nos. 0530010-022-AC, 0530010-026-AC and 0530010-030-AC]

F.43. Kiln No. 1 and 2 SNCR System Ammonia Injection Rate Monitoring System – A monitoring system to continuously measure and record the ammonia injection rates of the Kiln No. 1 and Kiln No. 2 SNCR systems (1-hour block averages) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations. The injection rate of ammonia solution measured in terms of volumetric flow rate shall be converted to pounds per hour as 100% ammonia. The amount of ammonia shall be recorded with the NOx CEMS data in the data acquisition handling system (DAHS).
[Rule 62-4.070(3), F.A.C.; Construction Permit Nos. 0530010-022-AC and 0530010-026-AC]

F.44. Kiln No. 1 Raw Mill Bypass Duct Cooling Dampers Process Monitoring – The following parameters shall be continuously monitored and recorded (and stored as an electronic file) during all modes of operation including raw mill on (operating) and raw mill off (bypassed), and all transition periods between operational modes:

a. the position of each damper associated with gas cooling for the purpose of D/F control (closed or position with respect to fully open);
b. any monitored airflows within the raw mill bypass duct system; and
c. any monitored temperature within the raw mill bypass duct system.

[Rule 62-4.070(3), F.A.C.; Construction Permit No. 0530010-018-AC]

F.45. Kiln No. 1 and 2 Baghouse Inlet Temperature Monitor - A temperature monitor shall be installed, calibrated, operated, and maintained to continuously measure and record the temperature of the exhaust gas at the inlet to, or upstream of, the Kiln No. 1 baghouse (Baghouse E-55) and at the Kiln No. 2 baghouse (Baghouse E-19) in accordance with the requirements of 40 CFR 63.1350 (Subpart LLL).
[Rule 62-208.800(11)(b), F.A.C.; 40 CFR 63.1350(f) (Subpart LLL version dated 12/20/2006) and 40 CFR 63.1350(g) (Subpart LLL version dated 2/12/2013)]

F.46. Kiln No. 1 Baghouse Dust Thallium Monitoring - Daily sampling and recording of the thallium concentration of the baghouse dust for Kiln No. 1 (Baghouse E-55) is required. The concentration of thallium in the baghouse dust shall not exceed 1.5%, per sample. Compliance shall be demonstrated using the "Thallium Concentration Monitoring and Analysis Procedure" as described in Mr. Bob Roger's letter to Dr. John Koogler, dated January 12, 1994 (Attachment #9 of Construction Permit No. AC27-240349).
[Rule 62-4.070(3), F.A.C.; Construction Permit No. AC27-240349; as included in Initial Title V Operation Permit 0530010-002-AV]

Recordkeeping and Reporting Requirements

F.47. Process Operational Records - To demonstrate compliance with the process rate and emission limitations specified in this permit, the owner or operator shall maintain the following records on site.

a. For each 1-hour block of operation, continuously monitor and record the dry preheater feed rate (tons/hour) and clinker production rate (tons/hour) for each kiln*. Records shall also document the dry preheater feed rate and clinker production rate for each consecutive 12-month period for each kiln (tons/12 consecutive month period).

(Permitting Note - Clinker production is not directly measured. It is a computed value based on*

measured preheater feed rate, and fuel and raw material properties.)

b. For Kiln No 1., records of the cement kiln temperature measurements during the burning of WTDF.

Documentation as to how the daily production rates were calculated shall be included as part of the records.
[Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; Construction Permit Nos. 0530010-003-AC/PSD-FL-233 and 0530010-026-AC; 40 CFR 63.1355 (Subpart LLL, version dated 2/12/2013)]

F.48. Kiln Fuel Records - In order to document compliance with the fuel-related requirements of Specific Condition Nos. F.4. through F.9., the permittee shall maintain the following daily fuel records for each kiln (Kiln Nos. 1 & 2).

a. Coal

1. The coal usage rate in tons/hour (daily average basis); and
2. the average sulfur content and heating value (Btu/lb) of each coal shipment based upon analysis of a sample representative of the shipment (trainload).

b. Liquid Fuels

1. The fuel type (number) and usage rate in gal/hour (daily average basis); and
2. records of the sulfur content and heating value (Btu/gal) of each oil shipment based upon analysis of a sample representative of the shipment. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the permittee.

c. Natural Gas

1. The fuel usage rate in cubic feet per hour (daily average basis); and
2. the average heating value (Btu/Ft^3) provided by the gas supplier.

d. Tires *(Note: this is only required for Kiln No. 1)*

1. The utilization/firing rate of WTDF shall be quantified (weighed) continuously and recorded hourly; and
2. the quantities of all deliveries of WTDF shall be documented and kept on record/file.

e. On-Specification Used Oil

1. Log of all periods when On-Specification Used Oil is used, including the following information:
   a. the conditions that required its use (i.e. startup, raw material feed stopped, etc.);
   b. the length of time the re-refined blend oil was fired (hrs);
   c. the quantity of re-refined oil blend used (gallons).
2. Documentation that the On-Specification Used Oil burned meets the requirements listed in Specific Condition F.4. shall be kept using records of the results of the analysis of representative as-received samples taken from each daily shipment received or collected at the facility. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement for daily shipments received. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the permittee.

[Rule 62-4.070(3), F.A.C.; Construction Permit Nos. 0530010-003-AC/PSD-FL-233 and 0530010-018-AC]

F.49. Daily Operation and Maintenance Information Logs - Files containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit shall be maintained at the facility. Operators shall keep daily operations and maintenance records to include, at a minimum, the following information:

a. the data collected from in-stack monitoring instruments;
b. the records on daily feed rates and clinker production rate;
c. the amount and type of fuel burned per affected unit;
d. calibration logs for all instruments;
e. maintenance/repair logs for any work performed on equipment or instrument which is subject to this permit; and
f. fuel analysis data.

All measurements, records, and other data required to be maintained by the Permittee, shall be retained for at least five (5) years following the data on which such measurements, records, or data are recorded. This data shall be made available to the Department upon request. The Department's Southwest District office shall be notified in writing at least 15 days prior to the testing (auditing) of any instrument required to be operated by this facility to allow witnessing by authorized personnel.
[Rules 62-4.070(3) and 62-213.440(1), F.A.C.; Construction Permit No. 0530010-003-AC/PSD-FL-233]

F.50. 40 CFR 63, Subpart LLL Recordkeeping Requirements - The permittee shall maintain records in accordance with the requirements of 40 CFR 63.1355 (Subpart LLL).
[Rules 62-204.800(11)(b) and (d); 40 CFR 63.1355 (Subpart LLL versions dated 12/20/2006 and 2/12/2013) and 40 CFR 63.10(b) and (c) (Subpart A)]

F.51. Nitrogen Oxides (NOx) Excess Emissions Reporting - The permittee shall notify the Compliance Assurance Program of the Southwest District Office of the Department within one working day of discovering any emissions in excess of the NO_x CEMS standard subject to the specified averaging period. Within one working day of occurrence, the owner or operator shall notify the Compliance Assurance Program of the Southwest District Office of the Department of any malfunction resulting in the exclusion of CEMS data.
[Rules 62-210.200, and 62-210.700, F.A.C.; Construction Permit No. 0530010-026-AC]

F.52. Nitrogen Oxides (NOx) Continuous Emission Monitor System CEMS) Quarterly Report - Within 30 days following the end of each calendar quarter, the permittee shall submit a NOx CEMS report to the Compliance Assurance Program of the Southwest District Office of the Department summarizing:
a. equipment malfunctions resulting in excluded CEMS data and/or excess emissions; and
b. the monitor availability of each CEMS.
The report shall contain the information and follow the general format specified in 40 CFR 60.7(c).
[Rules 62-4.070(3), 62-4.130, 62-204.800(8)(d), 62-210.700(6), F.A.C., and 40 CFR 60.7; Construction Permit No. 0530010-026-AC]

F.53. Allowable CEMS/COMS Data Exclusions Due to Startups, Shutdowns and Malfunctions - 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. NO_X CEMS 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.

b. Opacity COMS Data - All opacity COMS data shall be included in the compliance determination (including startup, shutdown, and malfunction).

c. Annual Operating Report - All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report (AOR) *(See Specific Condition No. FW11. in the Section II Facility-Wide Conditions.)*

[Rules 62-210.200 and 62-210.700, F.A.C.; Construction Permit No. 0530010-026-AC]

Additional Subpart LLL Recordkeeping and Reporting Requirements

1. Recordkeeping Requirements - See Specific Condition No. R.9.
2. Notification and Reporting Requirements – See Specific Condition No. R.10.

Notification of Modifications or Significant Changes

F.54. Notification of Significant Change: Dioxin/Furan and PM/PM_{10} - The owner or operator shall notify the Air Program of the Southwest District Office of the Department (Compliance Authority) in writing prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for dioxin/furan (D/F) or PM/PM_{10}. For purposes of this condition, significant means any of the following:

a. a physical or chemical change in the feed or fuel;
b. the use of a raw material not previously used;
c. a change in the LOI of the coal ash;
d. a change between non-beneficiated coal ash and beneficiated coal ash.

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/PM_{10} emission limits. The notification shall include an analysis of the effect of the proposed change on D/F and PM/PM10 emission rates. Based on the information provided, the Compliance Assurance Program of the Southwest District Office of the Department will promptly determine if performance testing pursuant to 40 CFR 63.1349(e) (Subpart LLL) will be required for the new feed or fuel.

*{Permitting Note - This condition is effective until September 9, 2015 or until the facility certifies compliance with the new Dioxin/Furan and PM limit required by 40 CFR 63 Subpart LLL (version dated 2/12/2013), whichever comes first. Specific Condition No. F.26. "*Supplemental Performance Test (Changes in *operations)" will supersede this condition.}*

[Rules 62-4.070(3), and 62-204.800(11)(b) F.A.C.; 40 CFR 63.1349(e) (Subpart LLL version dated 12/20/2006); Construction Permit No. 0530010-026-AC]

F.55. Modifications to the Whole Tire Derived Fuel (WTDF) Feed System (Kiln 1) - Any physical modifications to the WTDF feed mechanism that result in an increased feed rate, a change in the location where WTDF is introduced into the kiln (i.e., Kiln 1), or the introduction of WTDF into the kiln through the use of a mechanism other than a double air lock feed system, may require an air construction permit in accordance with Rule 62-210.300 (Permits Required), F,A.C. If the WTDF feed mechanism is to be physically modified in this manner, a description of such modification shall be submitted to the Air Program of the Southwest District of the Department 90 days prior to actual modification. The

Department shall review this information and, prior to any modification, determine whether further stack testing is required in order to determine if such modifications will result in an increase in actual emission and whether an air construction permit is necessary.
[Rules 62-210.200 (Definition of Modification), and 62-210.300, F.A.C.; Construction Permit No. 0530010-003-AC/PSD-FL-233]

Other Requirements

F.56. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-006	Clinker Storage Silo Nos. 1 & 2 (Baghouse F-31) Clinker Storage Silo Nos. 1 and 2 are used to store clinker from Clinker Cooler No. 1 (EU No. 004). Clinker is transferred by an inclined bucket elevator from Clinker Cooler No. 1 to Clinker Silo Nos. 1 and 2 at a maximum silo loading rate of 93 tons per hour. Clinker from these clinker silos feed Finish Mill Nos. 1 and 2. Also included as part of this emission unit are the Marginal Clinker Silo and the Gypsum Silo which are located adjacent to the clinker silos, also provide material to Finish Mill Nos. 1 and 2, and share a common baghouse emission control device with the clinker silos. Particulate matter emissions from Clinker Silo Nos. 1 and 2, the Marginal Clinker Silo, and the Gypsum Silo are controlled by a Western Precipitation Model PF-6012-150 Pulse Flow, 20,000 acfm (design air flow) common baghouse dust control device (i.e., Baghouse F-31).

Federal Regulations

G.1. Federal Rule Requirements - This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

G.2. Permitted Capacity - The maximum clinker loading (transfer) rate for Clinker Storage Silo Nos. 1 and 2 combined shall not exceed the following:

Maximum Process Rate	Averaging Time
93 tons/hour	Daily

{Permitting Note – Averaging time was previously established in Initial Title V Operation Permit 0530010-002-AV.}

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-018-AC]

G.3. Hours of Operation - The hours of operation of Clinker Storage Silo Nos. 1 and 2 shall not exceed 8,760 hours/year. Operation is defined as any period when clinker is being transferred into either Clinker Storage Silo Nos. 1 or 2.
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-191616 and AC27-191616 amendment dated 3/6/1992]

G.4. 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.}

G.5. Visible Emissions Limitation - Visible emissions (VE) from Clinker Storage Silo Nos. 1 and 2 shall not exceed the following limits:

Source	Baghouse ID	% Opacity
Clinker Storage Silo Nos. 1 and 2 *	F-31	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-191616 and 0530010-030-AC (BART Project)]

G.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from Clinker Storage Silo Nos. 1 and 2, and associated storage silos*, shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Clinker Storage Silo Nos. 1 and 2 *	F-31	1.45	5.72

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-191616 and 0530010-030-AC (BART Project)]

*{*Permitting Note - Also included as emission sources in this emission unit are the Marginal Clinker Silo and the Gypsum Silo which vent to the same common baghouse emission control device (Baghouse F-31) as the clinker silos.}*

G.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this emission unit is set by Specific Condition G.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse F-31) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.]

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.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

Method	Description of Method and Comments
	(minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

G.9. 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. Additionally, the process rate data (Clinker Storage Silo Nos. 1 and 2 combined loading/transfer tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310, F.A.C.]

G.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the Clinker Storage Silo Nos. 1 and 2 baghouse dust control device (Baghouse F-31) exhaust shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. G.7.}

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

Recordkeeping and Reporting Requirements

G.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

G.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate and operating hour limitations of Specific Conditions G.2., G.3. and G.9., the permittee shall maintain the following records for Clinker Storage Silo Nos. 1 and 2.

Daily Records

a. The total hours of operation (operation is defined as any period when clinker is being transferred into either Clinker Storage Silo No. 1 or 2).
b. The total amount (tons) of material loaded (transferred) to Clinker Storage Silo Nos. 1 and 2.
c. The daily average clinker silo loading rate, in tons/hour, based on items a. and b. above.

Monthly Records

1. The total operating hours for the month (hours/month).
2. The cumulative calendar year total operating hours.

Daily records shall be completed within 7 business days and monthly records shall be completed by the end of the following month.

{Permitting Note - This condition was previously established in Initial Title V Operation Permit 0530010-002-AV (process rate records only).}

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C]

Other Requirements

G.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-025	Additive Materials Storage Bin, and Finish Mill Nos. 1 and 2 Feed System Outsized/Outside Clinker Feed Hoppers (2) (all controlled by Baghouse M-1171) The Additive Material Storage Bin is used to store fly ash, masonry fringe and other additive materials associated with the manufacture of cement. Maximum material transfer rate is 36 tons per hour, on a daily average basis. The bin can be pneumatically loaded with fly ash from delivery trucks, or fringe material or other additive material can be transferred directly from the finish mill to this storage bin. Fringe material may also be recirculated from this bin back to the finish mill (EU No. 005) when required. The Finish Mill Nos. 1 and 2 Feed System Outsized/Outside Clinker Feed Hoppers (2) are used to feed clinker, from storage piles of outsized clinker generated onsite or clinker brought in from outside the plant by truck or rail, to Finish Mill Nos. 1 or 2 (EU No. 005). The hoppers are loaded from storage piles by a front end loader at a maximum rate of 30 TPH (approximately four 7.5 ton front end loader buckets per hour), on a daily average basis. Each of the hoppers discharges to transfer belts that then dispense to the feed belts feeding Finish Mill No. 1 or No. 2 (EU No. 005). Particulate emissions from the Additive Materials Storage Bin, and material transfer from the Outsized/Outside Clinker Feed Hoppers are controlled by an American Air Filter Fabri-Pulse 12-96-1530, 15,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-1171).

Federal Regulations

H.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

H.2. Permitted Capacity - The maximum process (transfer) rates shall not exceed the following:

Source(s)	Maximum Rate	Averaging Time
Transfer rate to or from the Additive Material Storage Bin	36 tons/hour	Daily Average
Transfer rate of clinker through the Outsized/Outside Clinker Feed Hoppers	30 tons/hour	Daily Average
Transfer rate of clinker through the Outsized/Outside Clinker Feed Hoppers	150,000 tons (total)	Rolling 12 consecutive months

Source(s)	Maximum Rate	Averaging Time
Transfer rate of clinker through the Outsized/Outside Clinker Feed Hoppers	100,000 tons (total from outside sources*)	Rolling 12 consecutive months

(* Clinker not produced at this facility, received from outside sources)

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. 0530010-016-AC and 0530010-018-AC]

H.3. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-213454 and 0530010-016-AC]

H.4. 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.}

H.5. Visible Emissions Limitation - Visible emissions (VE) from the exhaust of Baghouse M-1171, and from the transfer points associated with these hoppers (i.e., the front end loader dump point at the top of the hopper, the hopper bottom to hopper feed belt transfer points, and the hopper feed belt to Finish Mill Nos. 1 or 2 feed belt transfer points) shall not exceed 10% opacity.
[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. 10530010-016-AC]

H.6. Particulate Matter Emissions Limits - Particulate matter (PM) emissions shall not exceed the following levels:

Source	Baghouse ID	Grains/dscf	Pounds/Hour	Tons/Year
Additive Materials Storage Bin, and material transfer from the Outsized/Outside Clinker Feed Hoppers	M-1171	0.02	2.57*	11.3

(* Based on a maximum baghouse airflow rate of 15,000 acfm)

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-213454 and 10530010-016-AC]

H.7. Alternate Visible Emissions Limitation In Lieu of PM Testing for Baghouse M-1171 - The maximum allowable emission rate for particulate matter (PM) for these sources are set by Specific Condition H.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse M-1171) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of particulate matter stack testing.

[Rule 62-297.620(4), F.A.C.; Construction Permit Nos. AC27-213454 and 0530010-016-AC]

H.8. Particulate Emission Limiting Standards: Unconfined Emissions of Particulate Matter - The owner or operators shall not cause, let, permit, suffer or allow the emissions of unconfined particulate matter form vehicular movement, transportation of materials, or activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission. Reasonable precautions to prevent emissions of unconfined particulate matter from the Finish Mill Nos. 1 and 2 Feed System Outsized/Outside Clinker Feed Hoppers shall include the following.

a. The heavy equipment operator shall minimize drop height when material is being dumped into hoppers.

b. The top of the hoppers shall be equipped with a side skirt system such that the hopper loading dump point is enclosed on at least three sides.

c. Removal of particulate matter from paved areas used by front-end loader in moving outsized or outside clinker from storage areas to hopper in order to prevent reentrainment.

d. Application of water or other dust suppressants to unpaved roads, paved roads, yards, storage piles and other fugitive emission sources as required.

[Rules 62.4.070(3) and 62-296.320(4)(c), F.A.C.; Construction Permit No. 0530010-016-AC]

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.}

H.9. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

H.10. 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. In addition to the common testing requirements and procedures specified in Appendix TR, the permittee shall also comply with the following requirements.

a. Operation Rate During Testing: Compliance testing of emissions should be conducted during simultaneous operation of the three emission sources that make up this emission unit and are controlled by Baghouse M-1171 (i.e., the Additive Material Storage Bin and the two

Outsized/Outside Clinker Feed Hoppers) at 90-100% of their total combined maximum permitted process transfer rates (i.e. at 90-100% of 96 TPH (2 hoppers at 30 TPH each + Additive Material Bin loading at 36 TPH) which is ≥ 86.4 TPH), if feasible. If the combined operating rate is less than 90-100% of the maximum permitted rates (i.e., < 86.4 TPH), then subsequent operation is limited to a combined total of 110% of the tested process rate until such time as a new test is conducted at a different combined rate. This combined rate limitation will then also require that records be kept of the hourly process rates (daily average) of each of the three emission sources and their combined total hourly rate. Once the unit is so limited, operation at higher process rates is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to gain the authority to operate at a higher process rate, not to exceed the maximum permitted process rates of Specific Condition H.2.

b. Test Report Requirements: The process rate data (Additive Material Storage Bin loading rate and combined rate of transfer of clinker from Outsized/Outside Clinker Feed Hoppers, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rates and actual operating conditions (including specific description of material being transferred during the test period) for each of the emission sources covered by this emission unit, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit Nos. 0530010-016-AC and 0530010-018-AC]

H.11. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the Additive Materials Storage Bin, and Outsized/Outside Clinker Feed Hoppers baghouse dust control device (Baghouse M-1171) exhaust shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions (VE) standards as specified in Specific Condition Nos. H.5., H.6. and H.7.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. H.7.}

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

H.12. Compliance Tests Required Prior to Renewal - During the 180 day period prior to submittal of an application to renew this operation permit, the following Outsized/Outside Clinker Feed Hoppers transfer points shall be tested to demonstrate compliance with the visible emissions (VE) standard as specified in Specific Condition No. H.5.:

a. the front end loader dump point at the top of the hoppers (2);

b. the hopper bottom to hopper feed belt transfer points (2); and

c. the hopper feed belt to Finish Mill Nos. 1 or 2 feed belt transfer points (2);

This requirement is waived for a hopper if it is no longer being used and there are no future plans to use it.

[Rule 62-297.310(7)(a)3, F.A.C.]

Recordkeeping and Reporting Requirements

H.13. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

H.14. Additive Material Storage Bin Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Specific Conditions H.2. and H.10., the permittee shall maintain the following daily records for the Additive Material Storage Bin*.

a. The total hours of operation (operation is defined as any period when material is being transferred/loaded to the Additive Material Storage Bin).

b. The total amount of material transferred to the Additive Material Storage Bin, in tons, and a description of the material(s) transferred.

c. The daily average process/transfer rate, in tons/hour, based on items a. and b. above.

Daily records shall be completed within 7 business days.

*{*Permitting Notes – (1) See also Specific Condition No. H.10. for additional process rate recordkeeping that may be required based on the process rates at which compliance testing was conducted. (2)This condition was previously established in Initial Title V Operation Permit 0530010-002-AV.}*

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.]

H.15. Outsized/Outside Clinker Feed Hoppers Process Rate and Operating Hour Records - In order to document compliance with the process rate limitations of Specific Conditions H.2. and H.10, the permittee shall maintain a record of the clinker material transfer through each of the Outsized/Outside Clinker Feed Hoppers. At a minimum the records shall show the following for each hopper:

Daily Records *

a. the daily operating hours of the hopper (operation is defined as the time the hopper is in operation transferring material to a Finish Mill feed belt);

b. the daily tons of outsized clinker (generated onsite) loaded to the hopper, (or tons of outsized clinker transferred from the hopper to a Finish Mill feed belt);

c. the daily tons of outside clinker (clinker brought in from outside the plant) loaded to the hopper, (or tons of outside clinker transferred from the hopper to a Finish Mill feed belt);

d. the total clinker (sum of b. and c. above) throughput for the day;

e. a calculation of the average daily hopper clinker transfer rate (tons/hour) based on a. and d. above;.

(Permitting Note - See also Specific Condition No. H.10. for additional process rate recordkeeping that may be required based on the process rates at which compliance testing was conducted.)*

Monthly Records

f. the total tons of clinker (sum of outsized clinker and outside clinker) transferred through both of the hoppers for the month; (tons/month)

g. the total tons of clinker transferred through both the hoppers for the most recent 12 consecutive month period (tons/rolling 12 consecutive month period).

Documentation as to how daily average tons/hour process transfer rates were calculated shall be included as part of the record.
[Rules 62-204.800(7)(b)9. and 62-4.070(3), F.A.C.; Construction Permit No. 0530010-016-AC]

Other Requirements

H.16. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-005	Finish Mills Nos. 1 & 2 (Baghouses G-23-1 & G-23-2) Finish Mills Nos. 1 and 2 serve Cement Kiln No. 1. Clinker and other additive materials are transferred from storage silos (EU Nos. 006 & 025) to the finish mills where they are ground into finished cement product. The cement is then transferred to cement storage silos (EU No. 009). The maximum process rate for Finish Mills Nos. 1 and 2 combined is 105 tons per hour. Particulate matter emissions from the Finish Mills No. 1 are controlled by a Western Precipitation Model PF-6012-150 Pulse Flow, 15,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse G-23-1). Particulate matter emissions from the Finish Mills No. 2 are controlled by a Western Precipitation Model PF-6012-150 Pulse Flow, 15,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse G-23-2).
-019	Finish Mill No. 3 (Baghouse N-23) Portland cement Finish Mill No. 3 is used primarily to process clinker from Kiln No. 2. Clinker, gypsum and other additive materials are transferred from the Finish Mill No. 3 Clinker Day Tank and Gypsum Day Silo (EU 018) to Finish Mill No. 3 where they are ground into finished cement product. The cement is then transferred to Cement Storage Silo Nos. 7 and 8 (EU 021). The maximum process rate for Finish Mill No. 3 is 112 tons per hour. Particulate emissions are controlled by a Flex-Kleen Model 100-WMW-720, 46,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse N-23).

Federal Regulations

I.1. Federal Rule Requirements - This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

I.2. Permitted Capacity - The maximum process rate through Finish Mills shall not exceed the following:

EU ID No.	Description	Maximum Process Rate	Averaging Time
005	Maximum process rate through Finish Mill Nos. 1 and 2 combined	105 tons/hour	Daily
019	Maximum process rate through Finish Mill Nos. 3	112 tons/hour	Daily

[Rule 62-210.200 (Potential to Emit), F.A.C., Construction Permit Nos. 0530010-018-AC and AC27-258576]

I.3. Hours of Operation - These emission units are permitted to operate continuously (i.e., 8,760 hours/year) [Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-2257 and 0530010-005-AC]

I.4. 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.}

I.5. Visible Emissions (VE) Limitation - Visible emissions (VE) from EU No. 005 (Finish Mill Nos. 1 and 2) and EU No. 019 (Finish Mill No. 3) shall not exceed the following limits:

EU ID No.	Source	Baghouse ID	% Opacity
005	Finish Mill No. 1	G-23-1	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
	Finish Mill No. 2	G-23-2	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)
019	Finish Mill No. 3	N-23	10%

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit Nos. 0530010-018-AC & AC27-258576 and 0530010-030-AC (Bart Project)]

I.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from the finish mill shall not exceed the following levels:

EU ID No.	Source	Baghouse ID	Pounds/Hour	Tons/Year
005	Finish Mill No. 1	G-23-1	9	39.4
	Finish Mill No. 2	G-23-2	9	39.4
019	Finish Mill No. 3	N-23	4.0	16.40

[Rule 62-210.200 (Potential to Emit), F.A.C., Construction Permit Nos. 0530010-018-AC, AC27-258576 and 0530010-030-AC (Bart Project)]

I.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition I.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse exhaust visible emission (VE) limitation not to

exceed an opacity of 5% in lieu of particulate matter stack testing (applies to Baghouses G-23-1, G-23-2 and N-23).
[Rule 62-297.620(4), F.A.C.; Construction Permit Nos. 0530010-017-AC and AC27-258576]

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.}

I.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

I.9. 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. Additionally, the process rate data for EU No. 005 (Finish Mill Nos. 1 and 2 combined throughput rate, in tons/hour) and EU No. 019 (Finish Mill No. 3 throughput rate, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310, F.A.C.; Construction Permit No. AC27-258576]

I.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), EU No. 005 baghouse exhausts (Baghouses G-23-1 and G-23-2) and EU No. 019 baghouse exhaust (Baghouse N-23) shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. I.7.}

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

Monitoring of Operations

I.11. Visible Emissions Observations - In accordance with the requirements of 40 CFR 63.1350(e) (Subpart LLL), the owner or operator of a finish mill shall monitor opacity by conducting daily visual emissions observations of the particulate matter control device baghouses (baghouses G-23-1, G-23-2 and N-23) of these affected sources in accordance with the procedures of Method 22 of Appendix A to part 60 of this

chapter. The Method 22 test shall be conducted while the affected source is operating at the representative performance conditions. The duration of the Method 22 test shall be 6 minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator must:

a. Initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance (O&M) plan developed in accordance with 40 CFR 63.1350(a)(1) and (2) *(See Specific Condition No. R.4.)*; and

b. Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow-up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions are observed during the follow-up Method 22 test from any stack from which visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of Appendix A to part 60 of this chapter. The duration of the Method 9 test shall be 30 minutes.

{Permitting Note - See Specific Condition No. I.14. for recordkeeping requirements associated with this requirement.}

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1350(e) (Subpart LLL)]

Recordkeeping and Reporting Requirements

I.12. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

I.13. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Conditions I.2. and I.9., the permittee shall maintain the following daily records:

a. EU No. 005 - Finish Mill Nos. 1 and 2 daily records
   1. The total hours of operation (operation is defined as any period when clinker is being processed through either Finish Mill No. 1 or 2).
   2. The total amount of material processed through Finish Mill Nos. 1 and 2, in tons.
   3. The daily average process rate, in tons/hour, based items on 1. and 2. above.

   {Permitting Note – previously established in Initial Title V Permit No. 0530010-002-AV}

b. EU No. 019 - Finish Mill No. 3 daily records
   1. The total hours of operation (operation is defined as any period when material is being processed through Finish Mill No. 3).
   2. The total amount of material processed through Finish Mill No. 3, in tons.
   3. The daily average process/transfer rate, in tons/hour, based on items 1. and 2. above.

   {Permitting Note - Established in Construction Permit No.AC27-258576}

Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-258576]

I.14. Visible Emissions Observations Records - Records of the visible emissions tests required in Specific Condition I.11. shall be kept. These records shall meet the applicable requirements of 40 CFR 63, Subparts A and LLL. These records shall also include the date of the visible emissions test, process rate of the emissions unit at the time of the test, the name of the observer performing the test, the type of training the observer has had, and the date of the most recent training. These records and the site-specific operating and maintenance (O&M) plan shall be maintained at the facility and shall be made available to the Department upon request.

{Permitting Note - See also Specific Condition R.6. in the Common Conditions subsection (R).}

[Rules 62-213.440(1)(b)(2), 62-204.800(11)(b), F.A.C.; 40 CFR 63.1350(e) and 63.1355(a) (Subpart LLL)]

Other Requirements

I.15. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

{Permitting Note – In this subsection (Subsection G), specific condition references to Construction Permit No. AC27-2257, 0530010-017-AC and 0530010-018-AC apply to EU No. 005; specific condition references to Construction Permit No. AC27-258576 and 0530010-005-AC apply to EU No. 019.}

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

EU ID No.	Brief Description
-009	Portland Cement Storage Silos Nos. 1-5 (Baghouse H-03) Portland cement is transferred from Finish Mills Nos. 1, 2 and 3 (EU Nos. 005 & 019) into Portland Cement Storage Silo Nos. 1 through 5 at a maximum combined transfer rate of 210 tons per hour. Particulate matter emissions from cement transport and filling of the silos are controlled by a Western Precipitation Model PF-6012-120 Pulse Flow, 15,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse H-03).

Federal Regulations

J.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

J.2. Permitted Capacity - The total combined rate of transfer of cement from Finish Mills Nos. 1, 2 and 3 into Portland Cement Storage Silo Nos. 1 through 5 shall not exceed the following:

Maximum Process Rate	Averaging Time
210 tons/hour	Daily

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-008-AC]

J.3. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-008-AC]

J.4. 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.}

J.5. Visible Emissions Limitation - Visible emissions (VE) from Portland Cement Storage Silo Nos. 1 through 5 shall not exceed the following limits:

Source	Baghouse ID	% Opacity
Portland Cement Storage Silo Nos. 1-5	H-03	10% (Prior to 1/1/2014) 5% (on and after 1/1/2014)

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. 0530010-008-AC and 0530010-030-AC]

J.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from the loading of Portland Cement Silo Nos. 1 through 5 shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Portland Cement Storage Silo Nos. 1-5	H-03	36.05 (Prior to 1/1/2014) 5.0* (on and after 1/1/2014)	25 (Prior to 1/1/2014) 21.9* (on and after 1/1/2014)

*{*Permitting Note - Emissions limits were established in Construction Permit No. 0530010-030-AC}*

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-008-AC and 0530010-030-AC]

J.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition J.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse H-03) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC27-258565]

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.}

J.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

J.9. 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. Additionally, the process rate data (Portland Cement Storage Silo Nos. 1 through 5 transfer/loading rate, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit No. 0530010-008-AC]

J.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the Portland Cement Storage Silo Nos. 1 through 5 baghouse dust control device (Baghouse H-03) exhausts shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. J.7.}

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

Recordkeeping and Reporting Requirements

J.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

J.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Specific Conditions J.2. and J.9., the permittee shall maintain the following daily records for Portland Cement Storage Silo Nos. 1 through 5.

a. The total hours of operation (operation is defined as any period when cement is being loaded (transferred) into any of these cement silos).
b. The total combined amount of material loaded (transferred) to Portland Cement Storage Silo Nos. 1 through 5, in tons.
c. The daily average process/transfer rate, in tons/hour, based on items a. and b. above.

Daily records shall be completed within 7 business days.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. 0530010-008-AC]

Other Requirements

J.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

The specific conditions in this section apply to the following emissions units (EUs):

EU ID No.	Brief Description
-016	Clinker Silo No. 3 (Baghouse L-07)
-017	Clinker/Gypsum Transfer Belt (Baghouse M-09)
-018	Finish Mill No. 3 Clinker Day Tank & Gypsum Day Silo (Baghouse M-10)
	Brief Description for EU ID Nos. 016, 017 & 018: Clinker Silo No. 3 and the associated clinker/gypsum handling system is used to store and handle clinker and gypsum going to Finish Mill No. 3. Clinker (produced in Kiln No. 2) is transferred by an inclined bucket elevator from Clinker Cooler No. 2 (EU No. 015) to Clinker Silo No. 3 at a maximum silo loading rate of 93 tons/hour. Clinker from Clinker Silo No. 3 and the Marginal Clinker Silo is transferred via the Clinker/Gypsum Transfer Belt to the Finish Mill No. 3 Clinker Day (Surge) Tank at a maximum rate of 150 tons/hour. Gypsum from Gypsum Hopper No. 2 is transferred via the Clinker/Gypsum Transfer Belt to the Finish Mill No. 3 Gypsum Daily Silo at a maximum rate of 60 tons/hour. Clinker from the Clinker Day (Surge) Tank and Gypsum from the Gypsum Day Silo are then transferred to Finish Mill No. 3 for grinding. Particulate matter emissions from the loading of Clinker Silo No. 3 are controlled by a Flex-Kleen Model 100 WRW-112, 8,500 acfm (design air flow) baghouse dust control device (i.e., Baghouse L-07). Particulate matter emissions from the Clinker/Gypsum Transfer Belt are controlled by a Flex-Kleen Model 100 BVW-38, 3,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-09). Particulate matter emissions from the Finish Mill No. 3 Clinker Day Tank & Gypsum Day Silo are controlled by a Flex-Kleen Model 100 WRW-112, 8,500 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-10). *Note: Baghouse M-10 also controls the Clinker/Gypsum Transfer Belt for gypsum transfer to the Gypsum Day Silo, and also clinker transfer from the Clinker Day Tank to Finish Mill No. 3.*

Federal Regulations

K.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

K.2. Permitted Capacity - The maximum process (loading/transfer) rates shall not exceed the following:

EU No.	Source	Maximum Rate	Averaging Time
016	Clinker Silo No. 3 loading	93 tons/hour	Hourly
017 & 018	Transfer Belt to Clinker Day Tank	112 tons/hour	Rolling 30 operating day
017 & 018	Transfer Belt to Clinker Day Tank	150 tons/hour	Hourly
017 & 018	Transfer Belt to Gypsum Day Silo	60 tons/hour	Hourly

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. 0530010-005-AC and 0530010-018-AC]

K.3. Hours of Operation - These emissions units may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Permit 0530010-005-AC]

K.4. 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.}

K.5. Visible Emissions Limitation - Visible emissions (VE) from the operations covered by this subsection shall not exceed 10% opacity.
[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-258575]

K.6. Particulate Matter Emissions Limits - Particulate matter (PM) emissions shall not exceed the following levels:

EU No.	Source	Baghouse ID	Pounds/Hour	Tons/Year
016	Clinker Silo No. 3	L-07	1.45	5.95
017	Transfer Belt	M-09	0.51	2.09
018	Clinker Day Tank & Gypsum Day Silo	M-10	1.45	5.95

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-258575]

K.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for these sources are set by Specific Condition K.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with a baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of particulate matter stack testing (applies to Baghouse L-07, M-09 and M-10).
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC27-258575]

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.}

K.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

K.9. 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. Additionally, the process rate data (Clinker Silo No. 3 loading rate, rate of transfer of clinker to the Clinker Day Tank, and rate of transfer of Gypsum to the Gypsum Day Silo (all in tons/hour), as applicable based on which baghouse is being tested) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate(s) during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the tests and fail to provide reasonable assurance of compliance.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit No. AC27-258575]

K.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the exhaust stack of each of the three (3) baghouse dust control devices included in this subsection (Baghouses L-07, M-09, and M-10) shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. K.7.}

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

Recordkeeping and Reporting Requirements

K.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

K.12. Clinker Silo No. 3 Process Rate Records - In order to document compliance with the process rate limitations of Specific Conditions K.2 and K.9., the permittee shall maintain hourly records of the amount of clinker transferred from Clinker Cooler No. 2 to Clinker Silo No. 3 (tons/hour).
[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-258575]

K.13. Finish Mill No. 3 Clinker/Gypsum Transfer Belt Process Rate and Operating Hour Records - In order to document compliance with the process rate limitations of Specific Conditions K.2 and K.9., the permittee shall maintain the following hourly/daily records for each day of operation.

a. Clinker

Hourly Records

1. The hourly amount of clinker transferred from Clinker Silo No. 3 and the Marginal Clinker Silo to the Finish Mill No. 3 Clinker Day (Surge) Tank (tons/hour).

Daily Records

2. The total amount of material transferred to the Finish Mill No. 3 Clinker Day (Surge) Tank for the day and for the most recent 30 operating days (tons/day and tons/30 operating days).
3. The total operating hours for the day and for the most recent 30 days (hours/day and hours/30 operating days) (operation is defined as periods when material is being transferred as described in 1. above).
4. The 30 operating day average hourly transfer rate (tons/hour) based on 2. and 3. above.

b. Gypsum

Hourly Records

1. The hourly amount of gypsum transferred from the Gypsum Hopper No. 2 to the Finish Mill No. 3 Gypsum Day Silo (tons/hour).

Hourly records shall be completed within 24 hours. Daily records shall be completed within 7 business days.
[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-258575]

Other Requirements

K.14. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

The specific conditions in this section apply to the following emissions units (EUs):

EU ID No.	Brief Description
-021	Cement Silos Nos. 7 & 8 (Baghouse P-05) Cement is transferred pneumatically from Finish Mill Nos. 1, 2 and/or 3 (EU Nos. 005 & 019) to one or both Cement Storage Silo Nos. 7 and 8. The maximum combined total loading rate to Cement Storage Silo Nos. 7 and 8 is 155 tons/hour, based on a daily average. The silos are used to store Portland Cement and each silo has a storage capacity is 15,000 tons. Emissions from loading the two cement storage silos are controlled by a Western Flex-Kleen Model 100 WRW-144, 11,500 acfm (design air flow) common baghouse (Baghouse P-05).
-022	Masonry Cement Silo (Baghouse P-07) The Masonry Cement Storage Silo receives cement pneumatically from Finish Mill No. 1 only (EU No. 005). The maximum loading rate to the masonry cement storage silo is 71 tons/hour, based on a daily average. The silo is used to store Masonry Cement and has a storage capacity is 4,000 tons Emissions from loading this silo are controlled by a Western Flex-Kleen Model 100 WRW-30, 5,500 acfm (design air flow)baghouse (Baghouse P-07).
-023	Side No. 2 Truck Loadout System (Baghouse Q-17) Side No. 2 Truck Loadout System consists of two loadout bins (Bin No. 1 (East) and Bin No. 2 (West)) and two truck loadout spouts (East and West). Cement is transferred via air slides and a bucket elevator from Cement Storage Silo Nos. 7 and 8 (EU No. 021) to the two loadout bins at a maximum combined total loading rate of 350 tons/hour, based on a daily average. The two loadout bins then transfer the cement to the West truck loadout spout only at a maximum combined total loading rate of 286 tons/hour, based on a daily average. Transferring cement to the two loadout bins and transferring cement from the bins to the West truck loading spout to trucks can occur simultaneously. The East truck loadout spout receives cement from the Masonry Cement Storage Silo (EU No. 022) only and loads trucks at a maximum loading rate of 286 tons/hour, based on a daily average. The East and West truck loading spouts do not operate simultaneously. Emissions from loading the two loadout bins and two truck loadout spouts are controlled by a Western Flex-Kleen Model 100 WRW-30, 5,500 acfm (design air flow) common baghouse (Baghouse Q-17).

Federal Regulations

L.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

L.2. Permitted Capacity - The maximum process (loading) rates shall not exceed the following:

EU No.	Source(s)	Maximum Rate	Averaging Time	Baghouse ID
021	Combined loading rate for Cement Storage Silo Nos. 7 and 8	155 tons/hour	Daily Average	P-05
022	Masonry Cement Storage Silo loading rate	71 tons/hour	Daily Average	P-07
023	Combined loading rate for Side No. 2 Truck Loadout Bin Nos. 1 (East) and 2 (West)	350 tons/hour	Daily Average	Q-17
023	Loading rate for Side No. 2 Truck Loading Spouts (East and West) *	286 tons/hour	Daily Average	Q-17

***** The East and West Truck Loading Spouts are not permitted to operate simultaneously. See Specific Condition No. L.5.b.

[Rule 62-210.200 (Potential to Emit), F.A.C.); Construction Permit No. 0530010-004-AC]

L.3. Maximum Hours of Operation for Masonry Cement Storage Silo (EU 022) - The Masonry Cement Storage Silo is permitted for continuous operation (i.e., 8,760 hours per year).
[Rule 62-210.200 (Potential to Emit), F.A.C.; Permit 0530010-005-AC]

L.4. Maximum Hours of Operation for Cement Storage Silo Nos. 7 and 8 (EU 021) and Side No. 2 Truck Loadout System (EU 023) -

a. The maximum combined total cement loading time for Cement Storage Silo Nos. 7 and 8 shall not exceed 8,760 hours per year

b. The maximum combined total cement loading time for all* the activities associated with the Side No. 2 Truck Loadout System shall not exceed 8,760 hours per year.

*(*Includes loading of Side No. 2 Truck Loadout Bin Nos. 1 (East) and 2 (West) and operation of Side No. 2 Truck Loading Spouts (East and West).)*

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-005-AC]

L.5. Operating Requirements for Side No. 2 Truck Loadout System (EU 023) -

a. All cement products shall be transferred to transport trucks with a sealed pneumatic conveying system which is either a closed system or exhausted through a bag filter dust control device.

b. The East and West Truck Loading Spouts shall not operate simultaneously.

[Rules 62-210.200 (Potential to Emit), and 62-296.320(4)(c), F.A.C.; Construction Permit No. 0530010-004-AC]

L.6. 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.}

L.7. Visible Emissions Limitation - Visible emissions (VE) from the operations covered by this subsection shall not exceed 10% opacity.
[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. 0530010-004-AC]

L.8. Particulate Matter Emissions Limits - Particulate matter (PM) emissions shall not exceed the following levels:

EU No.	Source	Baghouse ID	Pounds/Hour	Tons/Year
021	Cement Storage Silo Nos. 7 and 8	P-05	1.00	4.10
022	Masonry Cement Storage Silo	P-07	0.50	1.88
023	Side No. 2 Truck Loadout System	Q-17	0.50	1.88

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-004-AC]

L.9. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for these sources is set by Specific Condition L.8. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with a baghouse dust control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of particulate matter stack testing (applies to Baghouses P-05, P-07 and Q-17).
[Rule 62-297.620(4), F.A.C.; Construction Permit No. 0530010-004-AC]

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.}

L.10. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

L.11. 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. Additionally, the process rate data (combined rate of transfer of material to Cement Storage Silo Nos. 7 and 8; rate of transfer of material to the Masonry Cement Silo; and, combined loading rate for Side No. 2 Truck Loadout Bin Nos. 1 and 2; and, combined loading rate for the Side No. 2 Truck Loading Spouts (all in tons/hour), as applicable based on which baghouse is being tested) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit No. 0530010-004-AC]

L.12. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), each of the baghouse dust control devices (Baghouses P-05, P-07 and Q-17) exhausts shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. L.9.}

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

Recordkeeping and Reporting Requirements

L.13. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

L.14. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate and operating hour limitations of Specific Conditions L.2, L.3., L.4. and L.11., the permittee shall maintain the following records/.

a. Cement Storage Silo Nos. 7 & 8

Daily Records

2. The total hours of loading cement to either Cement Storage Silo No. 7 or 8.
3. The combined total amount of cement loaded to Cement Storage Silo Nos. 7 and 8, in tons.
4. The daily average cement loading rate, in tons/hour, based on 1. and 2. above

Monthly Records

5. The total Cement Storage Silo Nos. 7 and 8 silo loading operating hours for the month (hours/month).
6. The cumulative calendar year total Cement Storage Silo Nos. 7 and 8 operating hours.

b. Masonry Cement Storage Silo

Daily Records

1. The total hours of loading cement to the Masonry Cement Storage Silo.
2. The total amount of cement loaded, in tons.
3. The daily average Masonry Cement Storage Silo loading rate, in tons/hour, based on 1. and 2. above.

c. Side No. 2 Truck Loadout System

Daily Records - Side No. 2 Truck Loadout Bins

1. The total hours of loading cement in either of the two Side No. 2 truck loadout bins.
2. The total amount of cement loaded in the two truck loadout bins, in tons.
3. The daily average cement loading rate of the two truck loadout bins, in tons/hour, based on 1. and 2. above.

Daily Records - East (Masonry) Truck Loadout Spout

4. The total hours of loading masonry cement from the East truck loadout spout to trucks.
5. The total amount of masonry cement loaded from the East truck loadout spout to trucks, in tons.
6. The daily average masonry cement loading rate from the East truck loadout spout to trucks, in tons/hour, based on 4. and 5. above.

Daily Records - West (portland cement) Truck Loadout Spout

7. The total hours of loading cement from the West truck loadout spout to trucks.
8. The total amount of cement loaded from the West truck loadout spout to trucks, in tons.
9. The daily average cement loading rate from the West truck loadout spout to trucks, in tons/hour, based on 7. and 8. above.

Monthly Records – Side No. 2 Truck Loadout System

10. The combined total hours of loading cement from all the activities for the month, based on 1., 4. and 7. above (hours/month), which is equivalent to the total time the baghouse is controlling emissions when loading cement.
11. The cumulative calendar year total Side No. 2 Truck Loadout System operating hours.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit Nos. 0530010-004-AC and 0530010-005-AC]

Other Requirements

L.15. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-026	Cement Bag Loadout System (Line No. 1) (Baghouse M-3514) At the Cement Bagging Line No. 1, portland cement and masonry cement are conveyed via air slide from the cement silos and loaded into bags at a maximum loadout rate of 47 tons per hour on a daily average basis. Particulate emissions from this bagging operation are controlled by an American Air Filter Fabri-Pulse 12-96-1530, 10,000 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-3514).

Federal Regulations

M.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

M.2. Permitted Capacity - The maximum Cement Bagging Line No. 1 cement bagging rate shall not exceed the following:

Maximum Process Rate	Averaging Time
47 tons/hour	Daily

{Permitting Note - averaging time was previously established in Initial Title V Operation Permit 0530010-002-AV.}

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-185904]

M.3. Maximum Hours of Operation - The maximum operating hours for Cement Bagging Line No. 1 shall not exceed 7,400 hours per year.
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. 0530010-018-AC]

M.4. 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.}

M.5. Visible Emissions Limitation - Visible emissions (VE) from Cement Bagging Line No. 1 shall not exceed 10% opacity.

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-185904]

M.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from Cement Bagging Line No. 1 shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Cement Bagging Line No. 1	M-3514	0.60	2.22

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-185904 and 0530010-018-AC]

M.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition M.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse M-3514) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. 0530010-018-AC]

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.}

M.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

M.9. 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. Additionally, the process rate data (Cement Bagging Line No. 1 cement bagging rate, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate during the test period, or operating at conditions

which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

{Permitting Note - This condition was previously established in Initial Title V Operation Permit 0530010-002-AV.}

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.]

M.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the Cement Bagging Line No. 1 baghouse dust control device (Baghouse M-3514) exhaust shall be tested to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. M.7.}

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

Recordkeeping and Reporting Requirements

M.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

M.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate and operating hour limitations of Specific Conditions M.2., M.3. and M.9., the permittee shall maintain the following records for Cement Bagging Line No. 1.:

Daily Records

a. The total hours of operation bagging cement.
b. The total amount of cement bagged, in tons.
c. The daily average cement loading rate, in tons/hour, based on items a. and b. above.

Monthly Records

d. The total operating hours for the month (hours/month).
e. The cumulative calendar year total operating hours.

Daily records shall be completed within 7 business days and monthly records shall be completed by the end of the following month.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-185904]

Other Requirements

M.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-027	Cement Bagging Line No. 2 (Baghouse M-3515) At the Cement Bagging Line No. 2, portland cement and masonry cement are transported by bucket elevator to a fluid or fan conveyor, shaker screen, holding bin and bagging machine at a maximum loadout rate of 47.0 tons per hour on a daily average basis. Particulate emissions from this bagging operation are controlled by a Flex-Kleen 100 WRW-112 Pulse Jet, 8,500 acfm (design air flow) baghouse dust control device (i.e., Baghouse M-3515).

Federal Regulations

N.1. Federal Rule Requirements – This emissions unit is subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry. The applicable provisions of 40 CFR 63 Subpart LLL are included in Subsection R, Specific Condition No. R.2.
[Rules 62-204.800(11)(b)&(d) and 62-213.440, F.A.C.]

Essential Potential to Emit (PTE) Parameters

N.2. Permitted Capacity - Maximum Process Rate Limitation - The maximum Cement Bagging Line No. 2 cement bagging rate shall not exceed the following:

Maximum Process Rate	Averaging Time
47.0 tons/hour	Daily

{Permitting Note – Averaging time was previously established in Initial Title V Operation Permit 0530010-002-AV.}

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-238889]

N.3. Maximum Hours of Operation - The maximum operation time for Cement Bagging Line No. 2 shall not exceed 6,240 hours per year.
[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit No. AC27-238889]

N.4. 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.}

N.5. Visible Emissions Limitation - Visible emissions (VE) from Cement Bagging Line No. 2 shall not exceed 10% opacity.

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.1345 (Subpart LLL version dated 2/12/2013); Construction Permit No. AC27-238889]

N.6. Particulate Matter Emissions Limit - Particulate matter (PM) emissions from Cement Bagging Line No. 2 shall not exceed the following levels:

Source	Baghouse ID	Pounds/Hour	Tons/Year
Cement Bagging Line No. 2	M-3515	1.4	4.4

[Rule 62-210.200 (Potential to Emit), F.A.C.; Construction Permit Nos. AC27-238889]

N.7. Alternate Visible Emissions Limitation In Lieu of PM Testing - The maximum allowable emission rate for particulate matter (PM) for this source is set by Specific Condition N.6. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because this source is equipped with a baghouse dust control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a baghouse (Baghouse M-3515) exhaust visible emission (VE) limitation not to exceed an opacity of 5% in lieu of a particulate matter stack test.
[Rule 62-297.620(4), F.A.C.; Construction Permit No. AC27-238889]

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.}

N.8. Compliance Test Methods - Required compliance tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1, 2, 4 and 5	Traverse Points, Velocity and Flow Rate, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources (minimum 60 minutes test duration*)

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.

*{*Permitting Note - See Specific Condition No.R.5. (Opacity test) in Subsection R. Common Conditions}*

[Rule 62-297.401, F.A.C.; 40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

N.9. 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. Additionally, the process rate data (Cement Bagging Line No. 2 cement bagging rate, in tons/hour) shall be monitored during each compliance test and shall be included in each emissions test report. Failure to submit the process rate along with the test report, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.; Construction Permit No. AC27-238889]

N.10. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), test the Cement Bagging Line No. 2 baghouse dust control device (Baghouse M-3515) exhaust to demonstrate compliance with the emissions standards for particulate matter (PM) and with the visible emissions standard.

{Permitting Note – The permittee may demonstrate compliance with the alternate visible emissions limitation (opacity ≤ 5%) in lieu of PM testing. See Specific Condition No. N.7.}

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

Recordkeeping and Reporting Requirements

N.11. Other Reporting Requirements - See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

N.12. Process Rate and Operating Hour Records - In order to demonstrate compliance with the process rate limitations of Specific Conditions N.2., N.3. and N.9., the permittee shall maintain the following records for Cement Bagging Line No. 2.:

Daily Records

a. The total hours of operation bagging cement.

b. The total amount of cement bagged, in tons.

c. The daily average cement loading rate, in tons/hour, based on items a. and b. above.

Monthly Records

d. The total operating hours for the month (hours/month).

e. The cumulative calendar year total operating hours.

Daily records shall be completed within 7 business days and monthly records shall be completed by the end of the following month.

[Rules 62-4.070(3), and 62-213.440(1)(b)(2), F.A.C.; Construction Permit No. AC27-238889]

Other Requirements

N.13. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU ID No.	Brief Description
-028	Facility Wide Fugitive Particulate Matter Emissions This emission unit includes fugitive particulate matter emissions from paved and unpaved roads, material storage piles, material handling activities, and other miscellaneous facility activities which can result in fugitive particulate matter (PM) emissions. This emission unit includes sand, mill scale and bauxite storage piles and associated transfer points to the material feed hoppers.

Operation Requirements

O.1. General Particulate Emission Limiting Standards: Unconfined Emissions of Particulate Matter -

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

b. Reasonable precautions and work practices to prevent emissions of unconfined particulate matter at this facility include:

1. Paving and maintenance of roads, parking areas and yards.
2. All permanent and temporary haul roads shall be watered or treated with chemical dust suppressants at regular intervals.
3. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
4. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles, and similar emission units.
5. Dry materials shall be stored below grade, in silos, or in enclosed structures.
6. Coal, mill scale, fly ash, gypsum, limestone, sand, bauxite, or other material stored at or above natural grade shall be compacted, turned and/or watered as necessary and shall be aligned with the predominant wind direction to minimize wind erosion.
7. Abandoned haul roads and other disturbed areas shall be revegetated within 60 days of the date that active service of the road ends.
8. All cement products shall be transferred to transport trucks with a sealed pneumatic conveying system which is either a closed system or exhausted through a bag filter.
9. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emission unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
10. Landscaping or planting of vegetation.
11. Use of hoofs, fans, filters, and similar equipment to contain, capture and /or vent particulate matter.
12. Confining abrasive blasting where possible.
13. Enclosure or covering of conveyor systems.

[Rules 62.4.070(3) and 62-296.320(4)(c), F.A.C.; Construction Permit Nos. 0530017-017-AC, 0530010-020-AC, and 0530010-027-AC]

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

EU ID No.	Brief Description
-032	Coal Handling and Grinding Coal delivered by rail car or truck is unloaded into coal unloading pits (hoppers) and transferred via covered coal feed belt conveyor either directly to the cement plant Coal Bin or to the coal stockpile via an inclined stacker conveyor. Coal is stored in the coal stockpile and a covered coal shed. From these storage areas, the coal is moved by front end loader to a coal loading pit and transferred via a covered coal feed conveyor belt to the cement plant Coal Bin. From the Coal Bin, coal is fed to the coal mills for each kiln (Coal Mill Nos. 1 and 2) for grinding to correct size. Ground coal from the coal mills is fed pneumatically to the kilns for firing. *{ **IMPORTANT REGULATORY CLASSIFICATIONS** - The coal handling operations from the Coal Bin up to and including the coal mills (grinding) are regulated under NSPS - 40 CFR 60, Subparts Y (Standards of Performance for Coal Preparation Plants) and Subpart A (General Provisions to 40 CFR 60), adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C. Handling of the coal from the grinder to the kiln is regulated by 40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry).}*

Federal Regulations

P.1. Federal Rule Requirements – Portions of this emissions unit, as described below, are subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart Y - Standards of Performance for Coal Preparation and Processing Plants (see Appendix NSPS 40 CFR 60, Subpart Y). The key applicable provision of Subpart Y is included in this permit in Specific Condition No. P.4.

a. Equipment/Activities subject to NSPS Subpart Y - The follow equipment/activities are subject to NSPS Subpart as specified in 40 CFR 60.250 and defined in 40 CFR 60.251:

1. "Coal processing and conveying equipment", defined as "any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts". For this facility, coal processing and conveying equipment would consist of Coal Mill Nos. 1 and 2, and the conveying systems and transfer points to and from the coal mills.
2. "Coal storage systems", defined as "any facility used to store coal except for open storage piles". For this facility coal storage systems would consist of the Coal Bin, which stores coal from the coal storage piles and feeds the two coal mills.

(NSPS Subpart Y Applicability Note: Subpart Y also applies to "coal transfer and loading systems" which are defined as "any facility used to transfer and load coal for shipment". Since this facility only receives and unloads coal and does not load coal for shipment, there are no "coal transfer and loading systems" at this facility for the purposes of applicability of Subpart Y.)

[Rules 62-204.800(8)(b)&(d) and 62-213.440, F.A.C.; 40 CFR 60.250 and 60.251 (NSPS Subpart Y)]

Essential Potential to Emit (PTE) Parameters

P.2. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[Rule 62-210.200 (Potential to Emit), F.A.C.]

P.3. 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.}

P.4. Visible Emissions Limitation (NSPS Subpart Y) - Visible emissions (VE) from any coal processing and conveying equipment or coal storage system, as defined in Specific Condition P.1., shall be less than 20 percent opacity. This applies to the following emission points;

a. transfer point from conveyor belt to the Coal Bin;
b. transfer points (2) from the Coal Bin to the conveying systems to Coal Mill No. 1 and Coal Mill No. 2.;
c. conveying systems (2) To Coal Mill No. 1 and Coal Mill No. 2 (if applicable based on the conveying systems having emission point(s));
d. Coal Mill No. 1.; and
e. Coal Mill No. 2.

[Rule 62-204.800(8)(b), F.A.C.); 40 CFR 60.250, 60.251 and 60.252(c) (Subpart Y)]

{Fugitive Emissions Permitting Note - See also Subsection O for fugitive dust control measures that apply to coal handling and storage activities. Visible emissions from coal unloading, handling, transfer and storage pile activities are limited by the Rule 62-296.320(b)(1), F.A.C. General Visible Emissions (VE) Standard of less than 20% opacity.}

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.}

P.5. Compliance Test Methods - Required compliance tests 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 (minimum 30 minutes test duration*)

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.
*{*Permitting Note - The duration of the performance test shall be 1 hour (ten 6-minute averages). If, during the initial 30 minutes of the observation of a Method 9 performance test, all of the 6-minute*

average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes. See 40 CFR 60.257(a)(1) (Subpart Y)}

[Rule 62-297.401, F.A.C.]

P.6. 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. In addition to the common testing requirements and procedures specified in Appendix TR, the permittee shall also comply with the following requirements.

a. Operation Rate During Testing: Compliance testing shall be conducted during coal grinding and transfer activities that are representative of normal operation, and shall include the period during which the highest opacity emissions can reasonably be expected to occur.

b. Test Report Requirements: The test report shall include a description of the operations being conducted done during the test and the estimated coal grinding/transfer process rate (tons/hour). Failure to submit the process rate along with the test report, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), 62-297.310(2), and 62-297.310(8)(c), F.A.C.]

P.7. Annual Compliance Tests Required - During each federal fiscal year (October 1st to September 30th), the coal grinding and handling system emission points listed in Specific Condition P.4. shall be tested to demonstrate compliance with the visible emissions standard.
[Rule 62-297.310(7), F.A.C.]

Other Requirements

P.8. Applicable Common Conditions - This emission unit is subject to the common conditions included in Subsection R – Common Conditions.
[Rule 62-4.070(3), F.A.C.]

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

EU No.	Brief Description
-34	Two Emergency Spark Ignition Engines (4SRB existing stationary RICE)

This emissions unit consists of the following Emergency Diesel Engines:

Description	Manufacturer	Model No.	Power (bhp)	Date of Construction
Pony Motor for Kiln No. 1	Wisconsin Motors LLC	V465D	65	Before 6/12/2006
Pony Motor for Kiln No. 2	Wisconsin Motors LLC	V465D	65	Before 6/12/2006

Federal Rule Requirements

Q.1. 40 CFR 63, Subpart ZZZZ Requirements. These existing emergency sparking ignition engines at a major source included in this emissions unit are subject to the applicable requirements contained in 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR 63, Subpart A - General Provisions. The applicable requirements for each engine (based on the facility NESHAP source status of "major", engine category and horse power (HP) rating) are shown in Appendix NESHAP - 40 CFR 63, Subpart ZZZZ - Summary of Requirements.

{Permitting Note - See "Appendix NESHAP-40 CFR 63, Subpart A" and "Appendix NESHAP-40 CFR 63, Subpart ZZZZ"}

[Rule 62-4.070(3), F.A.C.; 40 CFR 63 Subpart A and 40 CFR 63 (Subpart ZZZZ)]

Essential Potential to Emit (PTE) Parameters

Q.2. Hours of Operation. The permittee must operate this emissions unit according to the requirements in 40 CFR 63.6640(f)(1) through (3). In order for each engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year (per engine), as described in 40 CFR 63.6640(f)(1) through (3), is prohibited. If each engine is not operated according to the requirements in 40 CFR 63.6640(f)(1) through (3), the engines will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.

For each engine listed in this emissions unit:

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) Operation of emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year is allowed. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) of this section counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2).

(i) - Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer,

the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) - Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) - Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[Rule 62-210.200 (Potential to Emit), F.A.C., 40 CFR 63.6640(f)]

Operational and Maintenance Requirements

Q.3. The permittee shall comply with the requirements in 40 CFR 63, Subpart ZZZZ, Table 2c, Item 6 listed below:

O&M Requirements For Existing Spark Ignition Stationary Rice ≤500 Hp Located At A Major Source Of HAP Emissions	
a.	Change oil and filter every 500 hours of operation or annually, whichever comes first
b.	Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
c.	Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6602 and Table 2c (Subpart ZZZZ)]

Q.4. The permittee shall comply with the following monitoring, installation operational and maintenance requirements:

a. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

b. The permittee must install a non-resettable hour meter if one is not already installed.

c. The permittee you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d of Subpart ZZZZ apply.

[40 CFR 63.6625(e),(f)&(h) (Subpart ZZZZ)]

Subsection R. Common Conditions

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

EU No.*	Brief Description
002	Kiln No. 1 Feed System (Baghouse D-31)
003	Cement Kiln No. 1 (Baghouse E-55)
004	Cement Plant Clinker Cooler No. 1 (Baghouse F-18)
005	Finish Mills Nos. 1 & 2 (Baghouses G-23-1 & G-23-2)
006	Clinker Storage Silo Nos. 1 & 2 (Baghouse F-31)
008	Kiln No. 1 Blending Silo Nos. 1 and 2 (North and South) (Baghouse F-17 & E-36)
009	Portland Cement Storage Silos Nos. 1-5 (Baghouse H-03)
011	Raw Material Storage Silos & Feed System (Baghouses C-11 & C-11A)
012	Kiln No. 2 Blending Silo (No. 5 Blending Silo) (Baghouse G-11)
013	Kiln No. 2 Feed System (Baghouse H-13)
014	Cement Kiln No. 2 (Baghouse E-19)
015	Cement Clinker Cooler No. 2 (Baghouse K-09)
016	Clinker Silo No. 3 (Baghouse L-07)
017	Clinker/Gypsum Transfer Belt (Baghouse M-09)
018	Finish Mill No. 3 Clinker Day Tank & Gypsum Day Silo (Baghouse M-10)
019	Finish Mill No. 3 (Baghouse N-23)
021	Cement Silos Nos. 7 & 8 (Baghouse P-05)
022	Masonry Cement Silo (Baghouse P-07)
023	Truck Loadout System (Baghouse Q-17)
024	Raw Material Pre-Mix Bins (Baghouse M-2280)
025	Additive Material Storage Bin and Outsized Clinker Hoppers (Baghouse M-1171)
026	Cement Bag Loadout System (Line No. 1) (Baghouse M-3514)
027	Cement Bagging Line No. 2 (Baghouse M-3515)
032	Coal Handling and Grinding

Emission Limitations and Standards

R.1. Emission Limit Averaging Times - Unless otherwise noted in the specific conditions in the individual Emission Unit subsections, the averaging times for all emission limits (including visible emission (VE) limits) for which a stack test is the compliance method are based on the run time or averaging times of the specified test method.
[Rule 62-297.401, F.A.C.]

40 CFR 63 Subpart LLL Federal NESHAP Requirements

R.2. Hazardous Air Pollutants (HAP) Emission Standards: 40 CFR 63 NESHAP Requirements - These emission units are subject to and shall comply with the applicable requirements *(see below)* of 40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry) and Subpart A (General Provisions for 40 CFR 63), as adopted and incorporated by reference in Rule 62-204.800(11), F.A.C., contained in the attached Appendix NESHAP 40 CFR 63 Subpart LLL, which is a part of this permit.

*(**NOTE:** Entire section applies unless otherwise noted with specific applicable subsection references below the section Title.)*

a. NESHAP 40 CFR 63 Subpart LLL (Version dated 12/20/2006) Applicable Provision References

Section	Title	Items
GENERAL		
63.1340	Applicability and designation of affected sources.	
63.1341	Definitions.	
EMISSION STANDARDS AND OPERATING LIMITS		
63.1342	Standards: General.	
63.1343	Standards for kilns and in-line kiln/raw mills.	(a) and (b)
63.1344	Operating limits for kilns and in-line kiln/raw mills.	(a) through (h)
63.1345	Standards for clinker coolers.	
63.1347	Standards for raw and finish mills.	
63.1348	Standards for affected sources other than kilns; in-line kiln raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.	
MONITORING AND COMPLIANCE PROVISIONS		
63.1349	Performance testing requirements.	
63.1350	Monitoring requirements.	(a) through (g); (i) through (m); (o) and (p)
63.1351	Compliance dates	(a) through (c)
63.1352	Additional test methods.	
NOTIFICATION, REPORTING AND RECORDKEEPING		
63.1353	Notification requirements.	(a); (b)(2),(4) and (5)
63.1354	Reporting requirements.	
63.1355	Recordkeeping requirements.	
OTHER		
63.1356	Exemption from new source performance standards.	
63.1357	Temporary, conditioned exemption from particulate and opacity standards.	
63.1358	Implementation and Enforcement.	

b. NESHAP 40 CFR 63 Subpart LLL (Version dated 2/12/2013) Applicable Provision References

Section	Title	Items
GENERAL		
63.1340	Applicability and designation of affected sources.	
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 storage piles?	(a),(b) and (d)
63.1344	Affirmative defense for violation of emission standards during malfunction.	(a) and (b)
63.1345	Emissions limits for affected sources other than kilns; clinker coolers; new and reconstructed raw material dryers.	
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.	
63.1351	Compliance dates	(a) through (c)
63.1352	Additional test methods.	
NOTIFICATION, REPORTING AND RECORDKEEPING		
63.1353	Notification requirements.	(a); (b)(2),(3),(4) and (5)
63.1354	Reporting requirements.	
63.1355	Recordkeeping requirements.	
OTHER		
63.1356	Exemption from new source performance standards.	
63.1357	Temporary, conditioned exemption from particulate and opacity standards.	
63.1358	Implementation and Enforcement.	

[Rule 62-204.800(11)(b) and (d)1., F.A.C.; 40 CFR 63 (Subpart LLL versions dated 12/20/2006 and 2/20/2013)]

Operational Plan Requirements
(Permitting Note - These requirements are from 40 CFR 63 Subpart LLL, but are also shown here to highlight them.)

R.3. Startup, Shutdown and Malfunction (SSM) Plan - In accordance with 40 CFR 63.6(e)(3) of Subpart A (General Provisions to 40 CFR 63), the permittee shall develop and maintain a startup, shutdown, and malfunction (SSM) plan which conforms to the provisions of the above section. The plan shall describe, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction; and a program of corrective action for malfunctioning process, air pollution control, and monitoring equipment. The plan shall ensure that, at all times, the owner or operator operates and

maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by 40 CFR 63(e)(1)(i); and ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants.

{Permitting Note - See 40 CFR 63.6(e) (Subpart A), for the complete SSM Plan requirements. See also 40 CFR 63.10(b)(2)and (d)(5) for recordkeeping and reporting requirements associated with the SSM Plan.}

[Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.6(e)(3) and 63.10(b)(2) (Subpart A)]

R.4. Operation and Maintenance (O&M) Plan - In accordance with 40 CFR 63.1347 (Subpart LLL), for each emission unit and baghouse dust control device subject to these Common Conditions (and therefore subject to Subpart LLL), the permittee shall maintain a written Operation and Maintenance (O&M) Plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. The O&M Plan shall include at a minimum:

a. procedures for proper operation and maintenance of the affected source and air pollution control devices;

b. procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year; and

c. procedures to be used to periodically monitor affected sources subject to opacity standards in accordance with the following *(Note: This requirement does not apply to emission units equipped with continuous opacity monitoring systems (COMS) – EU's 003, 004, 014, and 015.)*:

   1. The permittee must conduct a monthly 1-minute visible emissions test of each emissions unit in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the emissions unit is in operation

   2. If no visible emissions are observed in six consecutive monthly tests, the permittee may decrease the frequency of testing from monthly to semi-annually. If visible emissions are observed during any semi-annual test, the permittee must resume testing on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

   3. If no visible emissions are observed during the semi-annual test, the permittee may decrease the frequency of testing from semi-annually to annually. If visible emissions are observed during any annual test, the permittee must resume testing on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

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

Baghouse inspections, observations and maintenance activities shall be recorded in a written log *(See Specific Condition No. R.8. for recordkeeping requirements associated with this condition)*. Failure to comply with any provision of the operations and maintenance plan developed in accordance with 40 CFR 63.1350(a) shall be a violation of the standard. *(Note: See 40 CFR 63.1347 in Appendix NESHAP 40 CFR 63 Subpart LLL for the complete O&M Plan requirements.)*

[Rules 62-204.800(11)(b), and 62-213.440(1)(b), F.A.C.; 40 CFR 63.1347 (Subpart LLL version dated 2/12/2013)]

Testing Requirements

R.5. Opacity Tests Requirements of 40 CFR 63 Subpart LLL - In accordance with 40 CFR 63.1349(b)(2)(Subpart LLL), if you are subject to limitations on opacity under this subpart, you must conduct opacity tests in accordance with Method 9 of Appendix A-4 to part 60 of this chapter. The duration of the Method 9 performance test must be 3 hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1 hour if the conditions of paragraphs (b)(2)(i) through (b)(2)(ii) of this section apply. For batch processes that are not run for 3-hour periods or longer, compile observations totaling 3 hours when the unit is operating.

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

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

{Permitting Note - Several emissions units throughout this permit are subject to a 10% opacity limit specified in 40 CFR 63, Subpart LLL . In some cases, a more stringent 5% opacity was specified in construction permits. When the more stringent 5% opacity is required for an emissions unit subject to 40 CFR 63, Subpart LLL, the performance test duration may be reduced to one hour.}

[40 CFR 63.1349(b)(2) (Subpart LLL version dated 2/12/2013)]

Monitoring Requirements

R.6. Process Measurement Equipment Requirements - The permittee shall install, operate, and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10%, or manufacturer's specifications, of its true value.
[Rule 62-297.310(5), F.A.C.]

Recordkeeping Requirements

R.7. Record Maintenance - At a minimum, all records and logs required by this permit shall be updated monthly. Hourly records shall be completed within 24 hours. Daily records/logs shall be completed within 7 business days and monthly records/logs shall be completed by the end of the following month. Records shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. The records shall be maintained at the facility and shall be made available to the Department upon request. Documentation as to how process rates were calculated shall be included as part of the records.
[Rules 62-4.070(3), and 62-213.440(1)(b), F.A.C.]

R.8. Monthly Visible Emission Test Records - Records of the monthly visible emissions tests required in Specific Condition R.4.c. shall be kept. These records shall meet the applicable requirements of 40 CFR 63.1355 (Subpart LLL) and 63.10(b) and (d) (Subpart A). These records shall also include the date of the visible emissions test, operating rate of the emissions unit at the time of the test, the name of the observer performing the test, the type of training the observer has had, and the date of the most recent training.
{Permitting Note - This condition was previously established in Initial Title V Operation Permit 0530010-002-AV.}

[Rules 62-204.800(11)(b), 62-213.440(1), F.A.C.; 40 CFR 63.1347 and 1355 (Subpart LLL version dated 2/12/2013) and 40 CFR 63.10 (Subpart A)]

R.9. Recordkeeping Requirements of 40 CFR 63, Subpart LLL - The permittee shall maintain records in accordance with the requirements of 40 CFR 63.1355 (Subpart LLL).
[Rules 62-204.800(11)(b) and (d); 40 CFR 63.1355 (Subpart LLL versions dated 12/20/2006 and 2/12/2013) and 40 CFR 63.10(b) and (c) (Subpart A)]

Reporting Requirements

R.10. Notification and Reporting Requirements of 40 CFR 63 Subpart LLL – The permittee shall comply with the notification and reporting requirements in 40 CFR 63, Subpart LLL. The requirements cover performance testing, continuous monitoring systems, continuous emissions monitoring systems and other related operational information used to demonstrate compliance with the PM, D/F, Mercury, THC and opacity emissions standards of the subpart. The notification and reporting requirements are specified in 40 CFR 63.1353 and 63.1354 of 40 CFR LLL.
[40 CFR 63.1353 and 63.1354 (Subpart LLL version dated 2/12/2013)]

Excess Emissions

*(**Note**: The following conditions apply only to the SIP-based emissions standards specified in this permit. Rule 62-210-700, F.A.C. (Excess Emissions) cannot vary or supersede any federal provision of the NSPS (40 CFR 60) or the NESHAP (40 CFR 63) programs.)*

R.11. Excess Emissions* - For startup, shutdown, and malfunctions the permittee shall investigate and correct any exceedances of the emission limitations established in the Conditions of this permit as soon as possible.

a. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing:
   1. best operational practices to minimize emissions are adhered to, and;
   2. the duration of excess emissions shall be minimized but in no case shall exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

c. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

d. In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

Definitions of Startup, Shutdown, Malfunction for purposes of this condition/rule:

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

- 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.

{ Permitting Note - The above rule cannot vary any requirement of an applicable NSPS or NESHAP provision.}*

[Rules 62-210.200 (Definitions), and 62-210.700, F.A.C.]

R.12. Notification of Excess Emissions Due to Malfunctions - 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. A full written report on the malfunction shall be submitted in a quarterly report, if requested by the Department.
[Rules 62-210.700(6) and 62-4.130, F.A.C.]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary
Appendix BD, BACT Determination for PSD-FL-233
Appendix CP-1, Compliance Plan
Appendix I, List of Insignificant Emissions Units and/or Activities
Appendix NESHAP 40 CFR 63, Subpart A - General Provisions
Appendix NESHAP 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry (version dated 12/20/2006)
Appendix NESHAP 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry (version dated 2/12/2013)
Appendix NESHAP 40 CFR 63, Subpart ZZZZ - NESHAP for Stationary Reciprocating Internal Combustion Engines
Appendix NESHAP 40 CFR 63, Subpart ZZZZ - Summary of Requirements
Appendix NSPS 40 CFR 60, Subpart A - General Provisions
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 and Processing Plants.
Appendix NSPS 40 CFR 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants
Appendix SO_2 CEMS - Standard CEMS Requirements For SO_2 Monitoring
Appendix RR, Facility-wide Reporting Requirements
Appendix TR, Facility-wide Testing Requirements
Appendix TV, Title V General Conditions

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)
Statement of Basis
Table H, Permit History
Table 1, Summary of Air Pollutant Standards and Terms
Table 2, Compliance Requirements