Florida Department of Environmental Protection

Northeast District
8800 Baymeadows Way West, Suite 100
Jacksonville, Florida 32256

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

PERMITTEE

Argos USA, LLC
4000 Northwest County Road (CR) 235
Newberry, Florida 32669

Responsible Official:
Mr. Chris Horner, Plant Manager

Air Permit No. 0010087-061-AC
(PSD-FL-228J and (PSD-FL-350(H))
Permit Expires: July 24, 2018
Minor Air Construction Permit

Argos Newberry Cement Plant
Connect natural gas supply line to EU003

PROJECT

This is the final air construction permit, which authorizes **1)** installation of a natural gas line, and Precalciner natural gas burner system for existing (EU003) In Line Kiln System/ Raw Mill- Line 1; **2)** To remove the Kiln BACT pollutant limits with basis on kiln feed rate for (EU003) In Line Kiln System/ Raw Mill- Line 1 and (EU010) In Line Kiln System/ Raw Mill- Line 2; **3)** Replace Kiln Line 2 Continuous Opacity Monitors (COMS) with continuous Parameter Monitoring System (CPMS) for (EU010); **4)** add that the Permittee can request to demonstrate by a Method 25A test that a fraction of THC is methane if exceedance of VOC limit is indicated by THC CEMS; **5)** Remove specific fuel composition requirements during compliance demonstration for EU003 In Line Kiln System/ Raw Mill- Line 1; **6)** added the wet processes for EU001 in accordance with 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants). The proposed work will be conducted at the existing Argos Newberry Cement Plant, which is a Portland cement plant (Standard Industrial Classification No. 3241). The existing facility is located in Alachua County at 4000 Northwest CR 235, in Newberry, Florida. The UTM coordinates are Zone 17, 3285.7 km North, 346.4 km East; Latitude 29º41’37” and Longitude 82º35’11”.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Jacksonville, Florida
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Julie R. Hudson

Julie R. Hudson
Environmental Manager
Permitting Program

JRH/lm

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

Chris Horner, Plant Manager, Argos USA, LLC, (CHorner@argos-us.com)
Dr. Maxwell Lee, Ph.D., P.E., Koogler and Associates, Inc., (mlee@kooglerassociates.com)
Henry Gotsch, Environmental Manager, Argos USA, LLC, (OGotsch@argos-us.com)
Ms. Barbara Friday, DEP OPC, Barbara.Friday@dep.state.fl.us
Ms. Lynn Scearce, DEP OPC, Lynn.Scearce@dep.state.fl.us

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Leslie Maybin — July 24, 2017
Clerk Stamp — Date

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

E.U. ID No.	Brief Description
001	Raw Materials Handling and Storage
002	Raw Mill System - Line 1 - Ancillary Equipment
003	In-Line Kiln/Raw Mill System - Line 1
004	Clinker Handling - Line 1
005	Finish Grinding Operations - Line 1
006	Cement Handling, Loading, and Bagging Operations
007	Coal Handling and Grinding Operations - Line 1
008	Clinker to Railcar/Truck Transfer Conveyor
009	Raw Mill System - Line 2 - Ancillary Equipment
010	In-Line Kiln/Raw Mill System - Line 2
011	Clinker Handling - Line 2
012	Finish Grinding Operations - Line 2
013	Cement Load-Out Silos 6 & 7
014	Coal Handling and Grinding Operations – Line 2
017	Emergency Diesel Engine (1,150 HP)
019	Emergency Diesel Fire Pump (83 HP)

PROPOSED PROJECT

This project creates new conditions and modifies several conditions in underlying air construction permits. The purpose of this project is primarily related to:

1) Authorizes the installation of a natural gas line, and Precalciner natural gas burner system for existing EU003 In Line Kiln System/ Raw Mill- Line 1.

2) To remove the Kiln BACT pollutant limits with basis on kiln feed rate for (EU003) In Line Kiln System/ Raw Mill- Line 1 and (EU010) In Line Kiln System/ Raw Mill- Line 2.

3) Replace Kiln Line 2 Continuous Opacity Monitors (COMS) with continuous Parameter Monitoring System (CPMS) for (EU010).

4) Add that the Permittee can request to demonstrate by a Method 25A test that a fraction of THC is methane if exceedance of VOC limit is indicated by THC CEMS.

5) Remove specific fuel composition requirements during compliance demonstration for EU003 In Line Kiln System/ Raw Mill- Line.

6) added the wet processes for EU001 in accordance with 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants).

This project will modify the following emissions units.

Facility ID No. 0010087

ID No.	Emission Unit Description
001	Raw Materials Handling and Storage
003	In-Line Kiln/Raw Mill System - Line 1

CONT:

ID No.	Emission Unit Description
004	Clinker Handling - Line 1
010	In-Line Kiln/Raw Mill System - Line 2
011	Clinker Handling - Line 2

FACILITY REGULATORY CLASSIFICATION

- The facility **is** a major source of hazardous air pollutants (HAP).
- The facility **has no** units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility **is** a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

  The facility **is** a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

1. Permitting Authority: The permitting authority for this project is the Northeast District Office of the Department of Environmental Protection (Department). The Northeast District Office mailing address is 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Northeast District Office (Compliance and Assurance) at: 8800 Baymeadows Way West, Suite 100, Jacksonville, Florida 32256.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be 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.]

7. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Source Obligation:

   a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.

   b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

9. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]

A. EU001 Raw Material Handling and Storage

EU No.	Brief Description
-001	Raw Materials Handling and Storage. *Control Equipment:* Water Sprays

This permitting action includes revisions to the existing construction permits shown in ~~strike through~~ format for deletions and in double underline format for additions. For ease of identification, all changes have been highlighted in yellow within this draft permit document.

1. The facility is subject the following Emission Standards:

EU001 Raw Material Handling and Storage				
EP	**Wet Materials exemption [1]**	**Opacity Limit**	**Permitted Tonnage [8]**	**Hour of Operation [2]**
01	Yes - requires ASP	10[3]	1330 TPH[5] 4,467,600 TPY Annual average in any consecutive 12-month period[6]	8760[5]
02	Yes- requires ASP			
03	Yes- requires ASP			
04	Yes- requires ASP			
05	No			
06	Yes – crusher requires ASP	15[3]		
07	No	10[3]		
08	Yes, first crusher requires ASP	15[3]		
10	Yes – requires ASP	10[3]		8760[5]
11	Yes- requires ASP			8760[9]
12	Yes- requires ASP	10[3]	1330 TPH[5] 4,467,600 TPY Annual average in any consecutive 12-month period[6]	8760[5]
13	Yes – requires ASP			
14	Yes – requires ASP			
15	Yes – requires ASP			
16	Yes – requires ASP			
17	Yes – requires ASP			

1. Continued:

18	Yes – requires ASP	7[4]		8760[10]

[1] Per 40 CFR 60.670(a)(2), Emission Unit 001 meets the definition of wet material processing operations (as defined in 40 CFR 60.671) and the material up to the first crush (EP06 and EP08) meets the definition of saturated material (as defined in 40 CFR 60.671). Therefore, only the crushers and the screening operations, bucket elevators and belt conveyors in the production line after the first crusher, grinding mill or storage bin are subject to the requirements of NSPS Subpart OOO. If the permittee receives an alternative sampling procedure (ASP) per Rule 297-620, F.A.C., they may follow the requirements of the ***ASP*** in lieu of the VE testing requirements in Rule 297-310(8)(a)3, F.A.C. Consequently, VE testing past the first crusher with regard to screening operations, bucket elevators and belt conveyors, etc. would only have to meet whatever requirements are in the ***ASP***. ASP approval to be determined by FDEP.
[2] Hours of operation based on applicable rules 62-4.160(2) and 62-210.200(PTE), F.A.C.
[3] Opacity limit established per Rule 62-204.800(8)(b)68, F.A.C.; Permit No. 0010087-031-AC; and 40 CFR 60.672(b), Table 3.
[4] Opacity limit established per Permit No. 0010087-049-AC; and 40 CFR 60.672(b), Table 3.
[5] Emission Unit 001 capacity shall not be affected by the occasional use of the (EP11) Mobile Powerscreen, and EP12 Mobile Powerscreen Conveyors. Unlimited hours of operation. [Permit Nos. 0010087-017-AC, 0010087-019-AC; and 0010087-029-AC]
[6] Annual average in any consecutive 12-month period based on the average processing rate of 510 TPH x 8,760 hours/year equals 4,467,600 TPY. 510 TPH is a design capacity and not a permit limit.
[7] Annual rate based on 480 hours/year x 150 TPH equals 72,000 TPY. Hour limitation established per Permit No. 0010087-017-AC.
[8] Production rates established per Permit Nos. 0010087-017-AC, 0010087-019-AC, 0010087-029-AC, and 0010087-031-AC.
[9] Hours of operation per Permit No. 0010087-031-AC, and Rule 62-210.200(PTE), F.A.C.
[10] Hours of operation per Permit No. 0010087-049-AC, and Rule 62-210.200(PTE), F.A.C.

[Rules 62-4.160(2); 62-210.200(PTE), F.A.C.; 40 CFR 60.670(a)(2); Rule 62-204.800(8)(b)68, F.A.C.; Permit No. 0010087-031-AC; 40 CFR 60.672(b), Table 3.; Permit Nos. 0010087-017-AC, 0010087-019-AC; 0010087-029-AC; Application 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

B. EU003 In-line Kiln/Raw Mill System Line 1

This section of the permit addresses the following emissions unit.

-003	**In-Line Kiln/Raw Mill System - Line 1.** The kiln system (or pyroprocessing system) includes the 156.5-foot kiln, a four-stage preheater tower, a 25,300 cubic foot multi-stage combustion (MSC) calciner, a tire feed system, two coal burners and ancillary equipment. A fabric filter baghouse controls particulate emissions. Staged combustion in calciner with waste tire feeding at the kiln inlet provides NOx control. Selective Non-Catalytic Reduction System (SNCR) is a nitrogen oxides control technology. This (SNCR) provides an alternate/backup/additional control technology at the facility to achieve compliance with the best available control technology (BACT). This can be used in conjunction with or in lieu of the strategy of staged combustion in the calciner and tire introduction at the kiln inlet. The process utilizes injection of ammonia solutions near the lowest preheater cyclone. The equipment consists of a storage tank, piping, pumps, compressed air delivery and injectors.

Commence Construction: 3/26/1999. Initial Startup Date: 12/17/1999

{Permitting note(s): At the election of the permittee, this emissions unit is regulated under the Emission Guidelines adopted by the Florida DEP in Rule 62-204.800(9)(f), F.A.C., under the requirements of 40 CFR 60 Subpart DDDD- Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units or separately regulated under 40 CFR 63, Subparts A (General Provisions) and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), NSPS- 40 CFR 60 Subpart F - Standards of Performance for Portland Cement Plants, Subpart A – General Provisions. This facility is exempted (except as provided in 40 CFR 63.1356)
from otherwise applicable NSPS requirements (40 CFR 60, Subpart F). Because the permittee can elect to make this EU subject to either; DDDD or LLL, the EU section includes two major subsections (DDDD) and (LLL). All references to DDDD are reference to the Florida DEP rule 62-204.800(9)(f), F.A.C. The EU also includes other conditions which apply regardless of applicability of DDDD or LLL.}

1. **<u>Existing Permits</u>**: This permit supplements all existing valid air permits. Unless otherwise specified, the permittee shall continue to comply with all applicable conditions from valid air construction and operation permits.

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

EQUIPMENT

2. **<u>New Equipment</u>**: The permittee is authorized to:

- Install on (EU003) In-line Kiln/Raw Mill System Line 1 a new precalciner burner system which will allow natural gas in the precalciner as a primary fuel.
- Install Piping for a higher-pressure feed line of natural gas to the existing In-line Kiln/Raw Mill System Line 1 precalciner burner.

The construction shall be in accordance with the application and associated documents provided to the Permitting Authority for the issuance of this permit. Any changes to the project that are contrary to these documents and permit shall be reported in writing to the Permitting Authority by the P.E. of Record.

[Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

3. **Emissions Standards**: This permit **does not** add to or modify any existing permitted emission standards for this EU.

INITIAL COMPLIANCE DEMONSTRATION (TESTING) WHILE COMBUSTING NATURAL GAS

4. **Initial PM, PM_{10}, SO_2, NO_X, CO, VOC, VE and Mercury Compliance Demonstrations.** The next regularly scheduled emissions testing after the higher-pressure feed natural gas supply line and a new precalciner burner system is connected to the existing In-line Kiln/Raw Mill System Line 1 precalciner burner, the owner or operator shall demonstrate compliance with the emission limits of this permit for

   EU003 while firing natural gas. The NO_X, and VOC certified CEMS and annual RATA test data shall satisfy the requirements of the annual compliance requirements. Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity.

   [Rule 62-4.070(1) Reasonable Assurance, F.A.C.]

5. **Annual Compliance Tests**: During each calendar year (January 1st to December 31st), the kiln (Line 1) stacks shall be tested to demonstrate compliance with the emissions standards for opacity.

   [Rule 62-297.310(8)(a)1, F.A.C.; and Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

RECORDKEEPING AND RECORDS

6. **Recordkeeping and Records Availability**: The permittee shall record the quantity of natural gas burned in the In-Line Kiln/Raw Mill System - Line 1 and keep the records on-site. All records shall be made available to the Department upon request.

   [Rule 62-4.070(1) and (3), Reasonable Assurance, F.A.C.; and Rule 62-4.030, General Prohibition, F.A.C.]

7. **Commencement of Construction and Operation.** After the connection of a natural gas supply line to the existing In-line Kiln/Raw Mill System Line 1 precalciner burner at **EU003** is installed, the permittee shall submit to the Air Compliance Authority of this Office written notifications of the date of commencement of construction and operation of **EU003**. These notifications shall be submitted or postmarked within as many days prior to the date of construction and operation commencement as practical, but no later than thirty (30) business day following commencement of construction and operation. Christopher.Kirts@dep.state.fl.us.

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

8. This Facility is subject to SECTION 2. Administrative Requirements of this permit and the attached Combined Appendices.

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

PERMITS BEING MODIFIED

The following conditions will supersede the conditions in the following permits:

9. Permit Being Modified: Permit Nos. AC01-267311/PSD-FL-228, 0010087-003-AC/PSD-FL-228A and 0010087-015-AC**.**
Specific Condition Nos. 6; and 3.

~~**C.17. Stack Test Conditions.** The manual stack test shall be conducted while firing a representative mixture of fuels (0 to 100% coal, 0 to 25% petroleum coke, 0 to 30% tires, and 0 to 5% fly ash), and while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity. Permitted capacity is defined as 90-100 % of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the units may be tested at less than 90% of the maximum operating rate allowed by the permit. In this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the units are so limited, then operation at higher capacities (with prior notification provided to the Department) is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit. [Rule 62-297.310(2)(b), F.A.C., and Permit Nos. AC01-267311/PSD-FL-228, 0010087-003-AC/PSD-FL-228A and 0010087-015-AC]~~

~~If the kiln is tested while firing less than 30% tires, subsequent operation is limited to 110% the percentage of tires burned during the test, not to exceed 30% of the total heat input. Once the kiln is so limited, then operation at greater tire burning rate (with prior notification provided to the Department) is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit.~~

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

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

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

~~[Permit No. 0010087-015-AC]~~

Stack Test. The manual stack test shall be conducted while firing a representative mixture of fuels, and while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the units may be tested at less than 90% of the maximum operating rate allowed by the permit. In this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the units are so limited, then operation at higher capacities (with prior notification provided to the Department) is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the permitted capacity in the permit.

[Permit No. AC01-267311/PSD-FL-228; and Application 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

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

Table II – Allowable Emissions
B. Florida Rock Industries

0010087-006-AC (PSD-FL-228C)

Pollutant	BACT Emission Limit		Emission Rate *		Basis++
	lb/ton clinker	~~lb/ton dry feed~~	~~lb/hr~~	~~ton/yr~~	
PM (kiln)	0.23	~~0.14~~	~~25.9~~	~~94~~	BACT
PM10 (kiln)	0.20	~~0.12~~	~~22.1~~	~~80~~	BACT
PM (cooler)	0.14	~~0.08~~	~~15.4~~	~~56~~	BACT
PM10 (cooler)	0.12	~~0.07~~	~~13.0~~	~~47~~	BACT
SO2 (kiln)	+ 0.16	~~0.10~~	~~17.7~~	~~64~~	BACT
NOX (kiln)**	2.45	~~1.50~~	~~271~~	~~980~~	BACT
~~H2SO4 (kiln)~~	~~0.0025~~	~~0.0016~~	~~0.25~~	~~1~~	~~BACT~~
CO (kiln)	2.50	~~1.55~~	~~276~~	~~1000~~	BACT
VOC (kiln)	0.11	~~.075~~	~~11.8~~	~~43~~	BACT

Notes:
* The kiln emission rate includes fuel oil combustion emissions from the raw mill air heater.
** Represents revised NOX limit (30-day rolling average) based on continuous monitoring data.
+ Represents revised SO2 limit (24-hour rolling average) based on compliance tests and continuous monitoring data.
++ BACT values are representative of kiln permitted in 1996 and reflective of as-built configuration and not as a new kiln.

[Rule 62.212.400(BACT), F.A.C.; and Permit No. 0010087-006-AC (PSD-FL-228C) Table II - Allowable Emissions; Permit No. 0010087-055-AC (PSD-FL-228I & 350(G) and Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

11. THC - Continuous Emissions Monitors. This monitor is an indicator of VOC emission levels. Permittee shall calibrate, maintain and operate a continuous emission monitoring system (CEMS) in the kiln/raw mill stack to measure and record the emissions of total hydrocarbons (THC as propane) to provide reasonable assurance that the facility will continue to meet the VOC emission limit established by permit. Permittee can request to demonstrate by a Method 25A test that a fraction of THC is methane if exceedance of VOC limit is indicated by THC CEMS.

{Permitting Note: The request to demonstrate by a Method 25A test that a fraction of THC is methane does not guarantee the Permittee that the data will be accepted by the Department.}

~~The CEMS system shall be certified, operated and maintained in accordance with Performance Specification 8A of Appendix B of 40 CFR 60. The CEMS shall be used in conjunction with a flow rate sensor certified in accordance with Performance Specification 6 of Appendix B, 40 CFR 60 to calculate THC emission rates. The owner or operator shall report no later than the 15th day following each calendar quarter a summary of the 30-day rolling average THC emission rates reported by the CEMS for the days of that calendar quarter to the~~

~~Department's Northeast District Office. The daily averages used to compute the 30-day rolling averages shall also be provided in the summary. These results should be reported as pounds per hour of THC, and pounds of THC per ton of clinker.~~

[Permit No. 0010087-003-AC/PSD-FL-228A; Permit No. 0010087-053-AC; and Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

C. EU004 Clinker Handling - Line 1

EU No.	Brief Description
-004	**Clinker Handling-Line 1.** This emissions unit includes the stack of the clinker cooler, designated by the applicant as **EP03.** EP01: Clinker Cooler Discharge (L-01) and breaker conveyor EP02: Clinker Silo North (L-06) EP03: Clinker Cooler (fabric filter baghouse) Fabric filters control particulate emissions.

Commence Construction: 3/26/1997. Initial Startup Date: 12/17/1999.

{Permitting note(s): This emissions unit is regulated under 40 CFR 63, applicable Subparts A (General Provisions) and LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), NSPS 40 CFR 60 Subparts A (General Provisions) and F (Standards of Performance for Portland Cement Plants); and PSD Regulations. This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F).}

Permit Being Modified: Permit No. 0010087-006-AC (PSD-FL-228C):

Affected Emissions Unit: EU004

Specific Condition No. 1

For the Clinker Handling-Line 1, the facility requested to remove the kiln clinker production limit since the permit already limits the cooler production so, there is no need to have the additional cooler production limit.

~~**Design Capacity.** The maximum production rate for the kiln clinker shall not exceed 110.2 tons per hour (24-hr rolling average), 115.0 tons per hour (peak hourly rate) and 2650 tons per day and 800,000 tons per year. The clinker production rate shall be determined as a function of the preheater dry feed rate.~~

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

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

Maximum Rate. The maximum rate is equivalent to EU003 (In-Line Kiln/Raw Mill System - Line 1) production limit to identify the capacity of the unit for the purposes of confirming that PM emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.

[Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

D. (EU010) In-line Kiln/Raw Mill System - Line 2.

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

Initial Startup Date: 03/10/2010.

{Permitting Note: At the election of the permittee, this emission unit is subject to Emission Guidelines adopted by the Florida DEP in Rule 62-204.800(9)(f), F.A.C., under the requirements of 40 CFR 60 Subpart DDDD- Commercial and Industrial Solid Waste Incineration Units. Rule 62-212.400, F.A.C., Prevention of Significant Deterioration or separately regulated under 40 CFR 63, Subparts A (General Provisions) and LLL (National Emission Standards for Hazardous Air Pollutants – General Provisions and National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), NSPS- 40 CFR 60 Subpart F - Standards of Performance for Portland Cement Plants, Subpart A – General Provisions. This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F).

1. **Existing Permits**: This permit supplements all existing valid air permits. Unless otherwise specified, the permittee shall continue to comply with all applicable conditions from valid air construction and operation permits.

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

EQUIPMENT

2. **PM CPMS**: The permittee is authorized to replace the existing kiln (Line 2) COMS with a PM CPMS to continuously monitor PM emissions. The permittee shall submit the monitor manufacturer, model, serial number, and date of installation of each monitor to the Compliance Authority within 30 days of final equipment selection.

   [Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H); and Rule 62-4.070(3), F.A.C.]

3. **Applicable NESHAP Provisions**: The PM CPMS shall comply with the applicable provisions in NESHAP Subpart A (General Provisions) and NESHAP Subpart LLL (NESHAP From the Portland Cement Manufacturing Industry) of 40 CFR 63, which are identified in the attached Combined Appendices of this permit.

   [Rule 62-204.800(11)(b)48, F.A.C.; 40 CFR 63, Subparts A – General Provisions; and 40 CFR 63, Subpart LLL]

MONITORING REQUIREMENTS

4. **PM CPMS**: The permittee shall install, calibrate and operate the PM CPMS on the kiln (Line 2) to continuously monitor emissions of PM and opacity.

   [Rule 62-4.070, 40 CFR 63, Subpart LLL; Rule 62-204.800(11)(b)48; Rule 62-204.800(9)(f); 40 CFR 60, Subpart DDDD]

5. **Annual Compliance Tests**: During each calendar year (January 1st to December 31st), the kiln (Line 2) stacks shall be tested to demonstrate compliance with the emissions standards for opacity.

   [Rule 62-297.310(8)(a)1, F.A.C.; and Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

6. **Test Requirements**: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.

   [Rule 62-297.310(9), F.A.C.]

7. **Test Methods**: Required 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

   The above methods are described in Appendix A of 40 CFR 60 and are 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, F.A.C.; and Appendix A of 40 CFR 60]

8. **Test Reports**: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.
   [Rule 62-297.310(10), F.A.C.]

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight.

PERMITS BEING MODIFIED

9. Permit Being Modified: Permit No. 0010087-031-AC, *Specific Condition Nos. 20.*

Affected Emissions Unit: EU010.

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

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

block average that shall be computed from a minimum of one measurement every minute. The CEM system shall express the results in units of pounds per ton of clinker produced, and pounds per hour. Permittee can request to demonstrate by a Method 25A test that a fraction of THC is methane if exceedance of VOC limit is indicated by THC CEMS

{Permitting Note: The request to demonstrate by a Method 25A test that a fraction of THC is methane does not guarantee the Permittee that the data will be accepted by the Department.}
[Rule 62-4.070(3), F.A.C., and BACT]

10. Permit Being Modified: Permit No. 0010087-031-AC (PSD-FL-350A):

Affected Emissions Unit: EU010

Specific Condition No. 27

REPORTING AND RECORD KEEPING REQUIREMENTS

27. **Records of Process and Production Rates**: The owner or operator shall make and maintain records of the process rate of dry preheater feed in units of tons per hour and tons per consecutive 12-month period, and the production rate of clinker and cement in units of tons per hour and tons per consecutive 12-month period. The owner or operator shall make and maintain records of the production of Portland cement in units of tons per consecutive 12-month period. Records in units of tons per hour shall be based on either hourly averages or daily averages and shall be completed no later than the day following the day of the record. Records in units of tons per consecutive 12-month period shall be made from monthly records of process and production rates for the past 12 months, and shall be completed no later than the ~~10~~ 30th day of each following month.

[Rule 62-4.070(3), F.A.C.; BACT; and Application No. 0310087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

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

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

    [Rule 62-4.070(3), F.A.C.; and Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

Changes to Visible Emissions Testing.

Testing Requirement. The test method for demonstrating compliance with opacity limit shall be EPA Method 9 (30 minutes, 6-minute averages) of 40 CFR 60 Appendix A–4. The Permittee shall conduct a visible emissions test at each emissions point on ~~an annual basis, once each federal fiscal year (October 1st to September 30th)~~ no less frequently than once every calendar year (January 1 – December 31). [Rule 62-297.310(8)(a)]

E. (EU011) Clinker Handling - Line 2.

EU No.	Brief Description
-011	**Clinker Handling – Line 2.** This emissions unit includes the stack of the clinker cooler, designated by the applicant as **2K15**. *Fabric filters control particulate matter emissions.* *PM CPMS to continuously monitor PM emissions and opacity.*

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

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

1. **Maximum Rate**. The maximum rate is equivalent to EU010 (In-Line Kiln/Raw Mill System - Line 2) production limit to identify the capacity of the unit for the purposes of confirming that PM emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability.

[Application No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]

Permit Being Modified: Permit No. 0010087-031-AC (PSD-FL-350A):

Affected Emissions Unit: EU011

Specific Condition No. 23

23. Emission Tests Required. ~~In addition to the continuous monitoring requirements of this permit, t~~ The owner or operator shall demonstrate compliance with the emission limits of this permit for emissions unit 011 annually using the test methods of 40 CFR 60 Appendix A specified below. ~~The tests conducted annually for the relative accuracy test audit (RATA) for the CEMS may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests.~~ The ~~COMS~~ CPMS shall be used to satisfy the annual VE testing requirement for EP 2K15. The Permittee shall conduct a visible emissions test at EPs 2L03, 2L12, 2L13, 2L15, 2L16 and 2L18 on an annual basis, no less frequently than once every calendar year (January 1 – December 31) ~~once each federal fiscal year (October 1st to September 30th)~~. ~~***Effective 9/9/2015,***~~ The Permittee shall also conduct a particulate matter emissions test at EP 2K15 on an annual basis in accordance with 40 CFR 63.1349(b)(1)(i) through (vi), no less frequently than once every calendar year (January 1 – December 31) ~~once each federal fiscal year (October 1st to September 30th)~~.

E. (EU011) Clinker Handling - Line 2.

POLLUTANT	TEST METHOD
PM	Method 5 or 5i[1]
PM_{10}	Method 5, assuming all PM measured is PM_{10}
VE	Method 9 and 22

1. The minimum sample volume shall be 30 dry standard cubic feet.

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

[Rules 62-204.800(11)(b)48, 62-212.400(BACT), 62-296.701(4)(a), (c) and (d), and 62-297.310(7), F.A.C.; 40 CFR 63.1350; Permit No. 0010087-031-AC (PSD-FL-350A); and Application No. 0310087-061-AC (PSD-FL-228J and (PSD-FL-350(H)]