

Argos USA, LLC  
Argos Newberry Cement Plant  
Facility ID No.: 0010087  
Alachua County

Title V Air Operation Permit Revision

**Permit No. 0010087-077-AV**

(Revision of Title V Air Operating Permit No. 0010087-062-AV)



**Permitting Authority:**

State of Florida  
Department of Environmental Protection  
Division of Air Resource Management  
Office of Permitting and Compliance  
2600 Blair Stone Road  
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Tallahassee, Florida 32399-2400  
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Email: [DARM\\_Permitting@dep.state.fl.us](mailto:DARM_Permitting@dep.state.fl.us)

**Compliance Authority:**

State of Florida  
Department of Environmental Protection  
Northeast District Office  
8800 Baymeadows Way West, Suite 100  
Jacksonville, Florida 32256  
Telephone: 904/256-1700  
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# Title V Air Operation Permit Revision

Permit No. 0010087-077-AV

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# FLORIDA DEPARTMENT OF Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**Ron DeSantis**  
Governor

**Jeanette Nuñez**  
Lt. Governor

**Shawn Hamilton**  
Secretary

**PERMITTEE:**

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

Permit No. 0010087-077-AV  
Argos Newberry Cement Plant  
Facility ID No. 0010087  
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit for the above referenced facility. The existing Argos Newberry Cement Plant is located in Alachua County at 4000 Northwest CR 235, Newberry, Florida 32669. UTM Coordinates Zone 17, 3285.7 kilometers (km) North, 346.4 km East; Latitude 29 /41/37 and Longitude 82/35/11.

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

Executed in Tallahassee, Florida.

0010087-077-AV Effective Date: September 1, 2021  
0010087-062-AV Effective Date: September 13, 2017  
Renewal Application Due Date: January 31, 2022  
Expiration Date: September 13, 2022

David Lyle Read, P.E., Environmental Administrator  
Office of Permitting and Compliance  
Division of Air Resource Management  
DLR/pks

## SECTION I. FACILITY INFORMATION.

### **Subsection A. Facility Description.**

Argos USA, LLC – Argos Newberry Cement Plant is a Portland cement plant located in Newberry, Florida. This facility consists of raw material handling and storage, raw mill systems, two kiln systems, clinker handling, finish grinding operations, cement handling, loading, and bagging operations, coal handling and grinding operations, and alternative fuel materials handling and processing operations.

### **Subsection B. Summary of Emissions Units.**

E.U.

| <u>ID No.</u> | <u>Brief Description</u>                                                      |
|---------------|-------------------------------------------------------------------------------|
| 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)                                            |
| 020           | Grinding and Screening Operations for Alternative Solid Fuels (Re-processing) |

Also, included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

### **Subsection C. Applicable Regulations.**

Based on the Title V air operation permit revision application received February 22, 2021, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (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.

| <b>Regulation</b>                                                                                                                     | <b>EU No(s).</b>                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| <i>Federal Rule Citations</i>                                                                                                         |                                                                           |
| 40 CFR 60, Subpart A, NSPS General Provisions                                                                                         | 001, 002, 003, 004, 005, 006, 007, 008, 009, 010, 011, 012, 013, 014, 017 |
| 40 CFR 60, Subpart F, NSPS for Portland Cement Plants                                                                                 | 002, 004, 005, 006, 008, 009, 011, 012, 013                               |
| 40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants                                                                                | 007, 014                                                                  |
| 40 CFR 60, Subpart OOO, NSPS for Nonmetallic Mineral Processing                                                                       | 001                                                                       |
| 40 CFR 60, Subpart DDDD, NSPS Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units * | 003, 010*                                                                 |

## SECTION I. FACILITY INFORMATION.

| Regulation                                                         | EU No(s).                                             |
|--------------------------------------------------------------------|-------------------------------------------------------|
| 40 CFR 60, Subpart IIII, NSPS for Stationary RICE                  | 017                                                   |
| 40 CFR 63, Subpart A, NESHAP General Provisions                    | 002, 004, 005, 006, 008, 009, 011, 012, 013, 017, 019 |
| 40 CFR 63, Subpart LLL, NESHAP for Portland Cement Manufacturing * | 002*, 004, 005, 006, 008, 009, 011, 012, 013          |
| 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE                | 017, 019                                              |
| <i>State Rule Citations</i>                                        |                                                       |
| Rule 62-4, F.A.C., Permits                                         | 001 – 014, 017, 019, 20                               |
| Rule 62-204.800, F.A.C., Federal Regulation Adopted by Reference   |                                                       |
| Rule 62-210.300, F.A.C., Permits Required                          |                                                       |
| Rule 62-212.400, F.A.C., Prevention of Significant Deterioration   |                                                       |
| Rule 62-213, F.A.C., Stationary Sources for Major Sources of Air   |                                                       |
| Rule 62-297, F.A.C., Stationary Sources – Emissions Monitoring     | 001 – 014, 20                                         |

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

*\*At the time of issuance of this Title V permit, the permittee has designated both kiln units (EU003 and EU010) to be subject to NSPS Subpart DDDD. EU 002 and EU 009 equipment have been clarified in this renewal permit to only include emissions from equipment related to the raw mills that do not vent through either kiln exhaust stack and thus remain subject to NESHAP Subpart LLL and not subject to Subpart DDDD.*

*At the election of the permittee, the kiln units may be determined to instead be subject to LLL in which case Subpart DDDD will then not apply. See EU003 and EU010 for Subpart LLL and Subpart DDDD conditions for switching the kiln units between Subpart LLL to Subpart DDDD}*

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## SECTION II. FACILITY-WIDE CONDITIONS.

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

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

### **Emissions and Controls**

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

**FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions.** The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

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

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

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

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

- Limestone and overburden.
- Iron oxide source (coal ash, iron ore, feldspar, gasified slag or other).
- Gypsum.
- Coal.
- Petcoke.
- High carbon flyash.

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

- All materials at the plant will be stored under roof on compacted clay or concrete.
- The plant area will be paved to limit the generation of UPM from truck and equipment traffic.
- A sweeper truck will be maintained and operated at the plant to limit dust buildup on paved surfaces.
- All materials are to be received and used with sufficient surface moisture.
- Water supply lines, hoses and sprinklers will be located near all material stockpiles.
- All plant equipment operators will be trained in basic environmental compliance and will perform visual inspections of materials before handling. If the visual inspections indicate a lack of excess surface moisture, the materials will be wetted with the sprinklers. Such wetting will continue until the materials can be handled without generating UPM.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in the renewal Title V permit application received 11/14/2016]

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## SECTION II. FACILITY-WIDE CONDITIONS.

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

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

[Rule 62-296.320(4)(c)3, F.A.C., Unconfined Emissions of Particulate Matter]

**EU020** - Grinding and Screening Operations for Alternative Solid Fuels (Re-processing). The permittee shall employ the following “reasonable precautions” to minimize fugitive dust emissions at the plant:

- a. Substantially enclose conveyors and bucket elevators to prevent ASF loss and fugitive dust emissions;
- b. Store ASF under cover;
- c. Conduct secondary processing (shredding, screening and sizing) under cover;
- d. If necessary to prevent fugitive dust caused by any ASF from leaving the plant property, the permittee shall apply water (or other environmentally acceptable dust suppressants) to the ASF; otherwise, the ASF shall be kept dry to facilitate burning.

[Rule 62-296.320, F.A.C. Permit No. 0010087-051-AC]

### **Reports and Fees**

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

**FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees.** The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection’s (DEP) Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP’s Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source’s most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1<sup>st</sup> of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070**. Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: <https://floridadep.gov/air/permitting-compliance/content/title-v-fees>. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, 40 CFR 403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: <http://www.dep.state.fl.us/air/emission/eaor>. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at [eaor@dep.state.fl.us](mailto:eaor@dep.state.fl.us).}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}*

**FW7. Annual Statement of Compliance.** The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the US. EPA at the address

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## SECTION II. FACILITY-WIDE CONDITIONS.

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shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective. (See also Appendix RR, Conditions RR1 and RR7.) [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303  
Attn: Air Enforcement Branch

**FW8. Prevention of Accidental Releases (Section 112(r) of CAA).** If, and when, the facility becomes subject to 112(r), the permittee shall:

- a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: <https://cdx.epa.gov>. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: <http://www2.epa.gov/rmp>. The RMP Reporting Center can be contacted at: 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]

**FW9. Solid Waste Storage.** Storage of solid waste at the facility shall not be in violation of the prohibitions of F.A.C. Rule 62-701.300. In addition, all solid waste material to be used in cement production shall be stored under cover, on compacted clay, to prevent the generation of runoff or leachate.

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

**FW10.** The Permittee shall store all hazardous waste generated at the site in D.O.T. approved containers and send it for disposal to a permitted hazardous waste facility in compliance with Chapter 62-730, F.A.C.

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

**FW11. Storage of Used Oil.** Containment of off-specification used oil must meet the following requirements:

- a. Off- specification used oil may not be stored in units other than tanks, containers, or units subject to regulation under 40 CFR 264 or 265.
- b. Containers and aboveground tanks used to store oil at burner facilities must be in good condition with no leaks.
- c. Containers used to store off- specification used oil must be equipped with a secondary containment system consisting of dikes, berms or retaining wall with a floor of an equivalent secondary containment system. The entire containment system must be impervious preventing any used oil released into the soil, groundwater, or surface water.
- d. Containers, above ground tanks and fill pipes used to transfer used oil into underground storage tanks at burner facilities must be clearly labeled or marked "Used Oil."
- e. The facility must also meet the following applicable requirements:
  - (1) Spill Prevention, Control and Countermeasures (40 CFR 112).
  - (2) Used oil burners are also subject to the Underground Storage Tank (40 CFR 280) regulations.

[Rule 62-710.200(2), F.A.C.; and 40 CFR 279, Subpart G, Permit 0010087-059-AC]

**FW12. Tires.** The Permittee shall not place waste tires on the ground. Waste tires shall be received in closed vehicles and unloaded directly into the tire-feeding hopper. In an effort to control mosquitoes at the site, waste tires shall be sprayed with an insecticide prior to receipt at the facility.

[Permit No. 0010087-049-AC (PSD-FL-228G)]

**FW13. Quarterly Monitoring Report.** A summary emission report of compliance continuous monitor systems shall be supplied to the Northeast District office on a quarterly basis in accordance with 40 CFR 60.7 within

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## SECTION II. FACILITY-WIDE CONDITIONS.

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30 days after each calendar quarter. All measurements, records and other data required to be maintained by the permittee shall be retained for at least 5 years following the date on which such measurements, records, or data are recorded. The data shall be available to Department staff as requested.

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

**FW14. Malfunctions.** A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions and shall be prohibited.

[Rules 62-210.200(176) and 62-210.700(4), F.A.C.; and Permit No. AC01-267311/PSD-FL-228]

**FW15. Facility Shutdown.** In the event of a permanent shutdown of the facility, all residual materials will be either properly disposed at a permitted facility or transported to other cement production facilities within six (6) months following shutdown.

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

**FW16. Open Clinker Storage Pile.** The owner or operator of an open clinker storage pile must prepare, and operate in accordance with, the fugitive dust emissions control measures, described in their operation and maintenance plan (see 40 CFR 63.1347), that is appropriate for the site conditions as specified in (1) through (3) of this condition. The operation and maintenance plan must also describe the measures that will be used to minimize fugitive dust emissions from piles of clinker, such as accidental spillage, that are not part of open clinker storage piles.

- (a) The operation and maintenance plan must identify and describe the location of each current or future open clinker storage pile and the fugitive dust emissions control measures the owner or operator will use to minimize fugitive dust emissions from each open clinker storage pile.
- (b) For open clinker storage piles, the operations and maintenance plan must specify that one or more of the following control measures will be used to minimize to the greatest extent practicable fugitive dust from open clinker storage piles: Locating the source inside a partial enclosure, installing and operating a water spray or fogging system, applying appropriate chemical dust suppression agents, use of a wind barrier, compaction, use of tarpaulin or other equally effective cover or use of a vegetative cover. The facility must select, for inclusion in the operations and maintenance plan, the fugitive dust control measure or measures listed in this paragraph that are most appropriate for site conditions. The plan must also explain how the measure or measures selected are applicable and appropriate for site conditions. In addition, the plan must be revised as needed to reflect any changing conditions at the source.
- (c) Temporary piles of clinker that result from accidental spillage or clinker storage cleaning operations must be cleaned up within 3 days.

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

**FW17. Excess Emissions.** An excess emission report shall be supplied to the Northeast District office on a quarterly basis in accordance with 40 CFR 60.7. All measurements, records and other data required to be maintained by the permittee shall be retained for at least 5 years following the date on which such measurements, records, or data are recorded. The data shall be available to Department staff as requested.

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

**FW18. Semi-Annual Reports.** The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 – June 30 and July 1 – December 31. The reports shall be submitted by the 60<sup>th</sup> day following the end of each calendar half (i.e., March 1<sup>st</sup> and August 29<sup>th</sup> of every year). All instances of deviations from permit requirements (including conditions in the referenced Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may

## SECTION II. FACILITY-WIDE CONDITIONS.

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be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. (See also Conditions RR2. – RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.) [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19(d) & 40 CFR 63.10(a)(5)]

*{Permitting Note: EPA has clarified that, pursuant to 40 CFR 70.6(a)(3), the word “monitoring” is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}*

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. Emissions Unit 001 Raw Material Handling and Storage

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

| EU No. | Brief Description                                                             |
|--------|-------------------------------------------------------------------------------|
| -001   | Raw Materials Handling and Storage.<br><i>Control Equipment:</i> Water Sprays |

Commence Construction: 3/26/1997. Initial Startup Date: 10/15/1999.

*{Permitting note(s): This emissions unit is regulated under NSPS – Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants adopted and incorporated by reference in Rule 62-204.800(8)(b)68, F.A.C.; NSPS- 40 CFR 60 Subpart A– General Provisions. For the purposes of 40 CFR 60 Subpart OOO, the affected sources were constructed prior to April 22, 2008, except for EP18.}*

| EU001 Raw Material Handling and Storage |          |                                                                                                                                                                                                                                        |
|-----------------------------------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EP                                      | Argos ID | SOURCE                                                                                                                                                                                                                                 |
| 01                                      | C01      | Raw Material Unloading C01 conveyor belt transfer/drop point onto C02 conveyor belt.                                                                                                                                                   |
| 02                                      | C02      | Raw Material Handling & Unloading C02 conveyor belt transfer/drop point from C02 discharge tripper-car onto ground pile.                                                                                                               |
| 03                                      | C08      | C01 second transfer point from conveyor C08 onto conveyor C01.                                                                                                                                                                         |
| 04                                      | C09      | C01 third transfer point from conveyor C09 onto conveyor C08.                                                                                                                                                                          |
| 05                                      | C04/C05  | Reclaimer and Dry Rock Storage from Reclaimer to D01.                                                                                                                                                                                  |
| 06                                      | C15      | Below- Water Rock Crusher.                                                                                                                                                                                                             |
| 07                                      | D01/D02  | Raw Material Handling and Unloading D01 transfer point from conveyor D01 onto conveyor D02.                                                                                                                                            |
| 08                                      | C25      | Above-Water Rock Crusher shrouded drop point/transfer point from C25 crusher to C23 underbelt.                                                                                                                                         |
| 10                                      | C10      | C10 Conveyor System point from C10 conveyor onto C09 conveyor.                                                                                                                                                                         |
| 11                                      | A26      | Mobile Powerscreen point from powerscreen A26 onto powerscreen-conveyor PP02.                                                                                                                                                          |
| 12                                      | A27      | Mobile Powerscreen conveyor transfer/drop point from powerscreen-conveyor A27 onto ground pile.                                                                                                                                        |
| 13                                      | C20      | Conveyor System (C20) at south end of existing (C10) from conveyor C20 onto conveyor C10.                                                                                                                                              |
| 14                                      | C22      | C22- 100 ft stacker conveyor on south end of new conveyor segment (C20) point from conveyor C22 into surge bin C21.                                                                                                                    |
| 15                                      | C21      | Covered Surge-bin/feeder (C21) that receives rock from C22 conveyor and places it onto conveyor C20 installed at interchange (C22 & C20) point from shrouded drop point/transfer point from surge-bin (C21) onto integral feeder-belt. |
| 16                                      | C21      | C21 Bin Feeder Underbelt drop point from integral feeder-belt C21 onto conveyor C20.                                                                                                                                                   |
| 17                                      | C23      | C23 Underbelt (integral to Crusher C25) drop point from underbelt C23 onto conveyor C22.                                                                                                                                               |
| 18                                      | C11      | C11 Conveyor system point from C10 conveyor onto C20 conveyor.                                                                                                                                                                         |

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**A.1. NSPS Requirements – Subpart OOO.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart OOO (Standards of Performance for Nonmetallic Mineral Processing Plants).

[Rule 62-204.800(8)(b)68, F.A.C.; and NSPS Subpart OOO of 40 CFR 60]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. Emissions Unit 001 Raw Material Handling and Storage

#### EMISSION LIMITATIONS AND STANDARDS

*{Permitting Note: Table 1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}*  
 Unless otherwise specified, the averaging time(s) for Specific Condition(s) **A.2.** are based on the specified averaging time of the applicable test method.

#### **A.2. Permitted Capacity and Limits of the EU:**

| EU001 Raw Material Handling and Storage                                                                                                                                                                                                                                                                                                                                                                                                     |                                      |                 |                                                                                                              |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------------|--------------------------------------------------------------------------------------------------------------|--------------------------------|
| EP                                                                                                                                                                                                                                                                                                                                                                                                                                          | Wet Materials exemption <sup>1</sup> | Opacity Limit   | Permitted Tonnage <sup>8</sup>                                                                               | Hour of Operation <sup>2</sup> |
| 01                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   | 10 <sup>3</sup> | 1330 TPH <sup>5</sup><br><br>4,467,600 TPY<br>Annual average in any consecutive 12-month period <sup>6</sup> | 8760 <sup>5</sup>              |
| 02                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 03                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 04                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 05                                                                                                                                                                                                                                                                                                                                                                                                                                          | No                                   |                 |                                                                                                              |                                |
| 06                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   | 15 <sup>3</sup> |                                                                                                              |                                |
| 07                                                                                                                                                                                                                                                                                                                                                                                                                                          | No                                   | 10 <sup>3</sup> |                                                                                                              |                                |
| 08                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes, first crusher requires ASP      | 15 <sup>3</sup> |                                                                                                              |                                |
| 10                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   | 10 <sup>3</sup> |                                                                                                              | 8760 <sup>5</sup>              |
| 11                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              | 8760 <sup>9</sup>              |
| 12                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   | 10 <sup>3</sup> | 1330 TPH <sup>5</sup><br><br>4,467,600 TPY<br>Annual average in any consecutive 12-month period <sup>6</sup> | 8760 <sup>5</sup>              |
| 13                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 14                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 15                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 16                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 17                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   |                 |                                                                                                              |                                |
| 18                                                                                                                                                                                                                                                                                                                                                                                                                                          | Yes – requires ASP                   | 7 <sup>4</sup>  |                                                                                                              | 8760 <sup>10</sup>             |
| [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 or 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 |                                      |                 |                                                                                                              |                                |

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection A. Emissions Unit 001 Raw Material Handling and Storage

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. EU 001 has the option of annual VE testing in lieu of a Department approved ASP.

[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; 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

*{Permitting Note: The applicant has estimated that the potential to emit from crushing, transfer and unloading operations is: PM<sub>3.0</sub>, and PM<sub>10</sub> 1.3 tons per year. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section. [40 CFR 60.672(d)]}*

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.3. Test Methods.** When 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 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

[Permit No. 0010087-031-AC; and 40 CFR 60.675(c).]

**A.4. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection A. Emissions Unit 001 Raw Material Handling and Storage

- A.5. Annual Compliance Tests Required.** No less frequently than once every calendar year (January 1 – December 31) each emission point that requires testing in **Specific Condition No. A.2.**, shall be tested to demonstrate compliance with the emissions standards for opacity.

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

- A.6. Repeat Performance Test.** A repeat performance test according to 40 CFR 60.11 and 40 CFR 60.675 shall be done within 5-years from the previous performance test for fugitive emissions from affected facilities without water sprays. Affected facilities controlled by water carryover from upstream water sprays that are inspected according to the requirements in 40 CFR 60.674(b) and 60.676(b) are exempt from this 5-year repeat testing requirement.

*{Permitting Note: If the facility has an appropriate ASP, then the ASP determines whether a repeat performance test is to be conducted.}*

[40 CFR 60.674(b) and 60.676(b), Table 3; and Air Construction Permit No. 0010087-049-AC]

- A.7. Visible Emissions Compliance Requirements.** Compliance with the visible emission standards shall be demonstrated in accordance with EPA Method 9, observations must be 30 minutes, five 6-minute averages. The visible emissions tests for EP11 and EP12 must be conducted at either EU 001 or EU 007.

[Rule 62-297.310(5)(b), F.A.C.; and Permit No. 0010087-031-AC]

- A.8. Compliance Requirements for Visible Emissions.**

- a. Compliance with opacity standard shall be determined by conducting observations in accordance with Method 9 in Appendix A and the procedures in 40 CFR 60.11 with the following additions:
  - (1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
  - (2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9 of Appendix A-4, Section 2.1) must be followed.
  - (3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.
- b. For purposes of determining initial compliance, the minimum total time of observations shall be 3-hours (30 6-minute averages) for the performance test.
- c. The opacity standard shall apply at all times except during periods of startup, shutdown, or malfunction.

[Rule 62-204.800(8)(b)68, F.A.C.; NSPS Subpart A of 40 CFR 60.8 and 60.11; and NSPS Subpart OOO of 60.675(c); and Air Construction Permit No. 0010087-049-AC.]

#### NOTIFICATION, RECORDKEEPING AND REPORTING REQUIREMENTS

- A.9. Reporting Requirements.** The owner or operator of any wet material processing operation that processes saturated and subsequently processes unsaturated materials, shall submit a report of this change within 30 days following such change. At the time of such change, this screening operation, bucket elevator, or belt conveyor becomes subject to the applicable opacity limit in 40 CFR 60.672(b) (**Specific Condition No. A.2.**), and the emission test requirements of 40 CFR 60.11. (**Specific Condition No. A.8.**)

[Rule 62-204.800(8)(b)68, F.A.C.; Permit No. 0010087-031-AC; and 40 CFR 60.676(f), (g)]

- A.10. Recordkeeping.** The owner or operator shall maintain records to document the monthly and the twelve month rolling totals of tons of rock crushed, conveyed and the hours of operation for each emissions point. These records shall be retained for five years.

### **SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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#### **Subsection A. Emissions Unit 001 Raw Material Handling and Storage**

[Permit Nos. 0010087-017-AC, 0010087-019-AC, and 0010087-029-AC.]

**A.11. Test Reports.** In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

[Permit Nos. 0010087-017-AC, 0010087-019-AC, and 0010087-029-AC]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection B. Emissions Unit 002 Raw Mill System Line-1 Ancillary Equipment

**Subsection B.:** This section addresses the following emissions unit

| EU No. | Brief Description                                                                                                                                                                                                                                                                                                                              |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -002   | <b>Raw Mill System Line 1 - Ancillary Equipment.</b> This emissions unit consists of operations that do not vent to EU003:<br>EP01: Raw Meal baghouse dust to homogenization silo (E-28)<br>EP03: Raw Meal baghouse dust into homogenization silo (G-07)<br>EP04: Raw Meal baghouse dust to preheater all controlled by fabric filters (H-08). |

Commence Construction: 3/26/1997. Initial Startup Date: 10/15/1999.

EP01, EP03 and EP04 have individual baghouses which are addressed in and regulated under this Subsection B. Other pollutant emissions from the Raw Mill including raw mill heater fuel emissions, that are emitted through EU 003 and are separately addressed in and regulated under Subsection C for EU 003.

*{Permitting note(s): This emissions unit is regulated under applicable portions of 40 CFR 63, Subparts A (General Provisions) and LLL (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 applicable portions of Subpart A – General Provisions, and PSD. This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F)}*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**B.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) attached to and is part of this permit. [Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F]

**B.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL. [Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL]

**B.3. Design Capacity.** The maximum throughput rate for this emissions unit has a designed rate of 255 tons per hour of recycled dust plus raw meal. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and Permit No. 0010087-055-AC ((PSD-FL-228I & 350G)]

*{Permitting Note: These baghouse emissions are not contingent on the raw mill design rate and therefore the maximum rates identify the capacity of each emission point for the purposes of confirming that PM emissions testing is conducted within 90 to 100 percent of the unit's rated capacity per 62-297.310(3.) and VE testing is based on FDEP rule, 62-297.310(5)(b), "The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur."}*

**B.4. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

#### EMISSION LIMITATIONS AND STANDARDS

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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection B. Emissions Unit 002 Raw Mill System Line-1 Ancillary Equipment

##### **B.5. Visible Emissions.**

- a. Visible emissions at each emissions point at this emissions unit shall not exceed 5 percent opacity.  
[Rules 62-212.400(BACT), Permit No. AC01-267311/PSD-FL-228]
- b. NESHAP Subpart LLL. Visible emissions at each emissions point at this emissions unit shall not exceed 10% opacity.  
[40 CFR 60.62(c); 62-204.800 (11)(b)48, F.A.C.; 40 CFR 63.1345]  
*{Permitting Note: in accordance with 40 CFR 60.62(d), if the facility has an affected source subject to this subpart with a different emissions limit or requirement for the same pollutant under another regulation in title 40 of this chapter, once the facility is in compliance with the most stringent emissions limit or requirement, the facility is not subject to the less stringent requirement. Until the facility is in compliance with the more stringent limit, the less stringent limit continues to apply. NSPS Subpart F has an opacity limit of 10% which is less stringent than BACT.}*

##### **B.6. Particulate Matter.** Particulate Matter emissions at each emission point at this emissions unit shall not exceed 0.01gr/dscf.

[Rule 62-212.400(BACT), F.A.C.; Permit No. AC01-267311/PSD-FL-228].

*{Permitting Note: The averaging time for **Condition B.5. and B.6.** is based on the run time of the specified test method.}*

#### **TEST METHODS AND PROCEDURES**

*{Permitting note: 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.7. Visible Emissions (Required for each EP).**

BACT Annual VE Testing Requirement. The test method for demonstrating compliance with the 5% 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 no less frequently than once every calendar year (January 1 – December 31).

[Rule 62-297.310(8)(a)]

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

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

##### **B.8. Particulate Matter.** Compliance with the particulate matter limit shall be demonstrated by conducting the visible emissions test required under specific condition **B.5**. The Permittee shall demonstrate compliance at each emissions point no less frequently than once every calendar year (January 1 – December 31). Because of the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with a Fabric Filter control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of the particulate stack test.

Should the Department believe the particulate emission standards is not being met, the Department may require that compliance with the particulate emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.

[Rules 62-297.620(4), 62-297.310(8)(a)4., F.A.C., Permit No. AC01-267311/PSD-FL-228; and Permit No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection B. Emissions Unit 002 Raw Mill System Line-1 Ancillary Equipment

##### B.9. (LLL) Periodic Visible Emissions – EPA Method 22.

- a. Sources subject to a limitation on opacity under 40 CFR 63.1345 (**Specific Condition No. B.5.**) must conduct required emissions monitoring in accordance with the following (i) through (vii) of this **Specific Condition** (40 CFR 63.1350(f)(1)(i) through (f)(1)(vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347) (**Specific Condition No. B.11.**) The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. B.10.**, and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)) **Specific Condition No. I.9.**, if applicable.
1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A–7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1 hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. (Not Applicable) (*The mill sweep and air separator vent to EU 003*)
- c. *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under **Specific Condition No. B.9.**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800(11)(b)48, F.A.C.; and, 40 CFR 63.1350(f)(1), (3)]

*{Permitting Note: For LLL compliance by Method 9 testing, of the opacity limit is 10%. If this testing is used to suffice for annual testing required by **Specific Condition No. B.5.a.**, the opacity limit is 5 percent.}*

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection B. Emissions Unit 002 Raw Mill System Line-1 Ancillary Equipment

##### (LLL) NOTIFICATIONS, RECORDS AND REPORTS

**B.10. (LLL) Opacity Monitoring Plan.** If the facility demonstrates compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o)(1) - (5) and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

**B.11. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The facility operations and maintenance plan must address periods of startup and shutdown.
- Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above in B.9.b.*)

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347]

##### GENERAL

**B.12.** In the event that Fabric Filter or ESP catches come in contact with the soil, the waste shall be collected and a hazardous waste determination performed for metals in accordance with 40 CFR 262.11 and Rule 62-730.160, F.A.C. If the hazardous waste determination indicates that the material is hazardous, it shall be disposed of in a permitted hazardous waste disposal facility. If the material is not hazardous, the waste material is a solid waste as defined in Chapter 62-701, F.A.C. and must be disposed of in a permitted, lined landfill. The Permittee shall contact the Solid Waste Section, Northeast District Office, at telephone number (904) 256-1700, prior to disposal of the fugitive Fabric Filter or ESP catches which are to be disposed of as solid waste.

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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

**Subsection C.: This section addresses the following emissions unit**

| EU No. | Brief Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -003   | <p><b>In-Line Kiln/Raw Mill System - Line 1.</b> 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.</p> <p>Pollutant controls include: fabric filter, selective non-catalytic reduction (SNCR), sorbent injection, staged combustion, tire injection, and dust shuttling system (DSS). Where the fabric filter controls PM, SNCR controls NOx, sorbent injection controls acid gases and metals, staged combustion and tire injection controls NOx, and DSS controls mercury emissions.</p> |

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 from the Portland Cement Manufacturing Industry). 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. All references to DDDD are references 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.*

*The in-line raw mill includes a raw mill heater system that vents to EU003. Allowances of the heater system (e.g., fuels, etc.) are defined in this Subsection.*

At the time of issuance of this Permit No. 0010087-062-AV, this EU is subject to DDDD.

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

#### **ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS**

##### **C.1. NESHAP LLL Applicability.**

- NESHAP Subpart A. If this emissions unit becomes subject to NESHAP Subpart LLL (See **Specific Conditions C.1.b.** and **C.3.**) it shall comply with all the applicable standards contained in 40 CFR 63 Subpart A - National Emission Standards for Hazardous Air Pollutants - General Provision. NESHAP Subpart A is included in the appendices document. [NESHAP Subpart A]
- NESHAP Subpart LLL. Currently the permittee uses or intends to use secondary materials identified as solid waste (40 CFR 241) as a fuel or raw material in the kiln system, therefore the requirements of Rule 62-204.800(9)(f), F.A.C., (DDDD) apply rather than LLL. If the operator ceases to use materials identified as a solid waste for a fuel in the kiln, then the operator may comply instead with the applicable requirements of NESHAP Subpart LLL as provided in Appendix NESHAP Subpart LLL. If the operator resumes use of materials identified as a solid waste for fuel in the kiln, however, the requirements of Rule 62-204.800(9)(f), F.A.C., will apply immediately (in lieu of LLL)}. [40 CFR 63.1348(a)]

##### **C.2. NSPS Applicability.**

- NSPS Subpart A. Whether subject to LLL or DDDD this emissions unit shall comply with all the applicable standards contained in 40 CFR 60 Subpart A – New Source Performance Standards – General Provisions. NSPS Subpart A is included in the appendices document. [NSPS Subpart A]
- NSPS Subpart DDDD. The main stack emission point, shall comply with all the applicable standards of Rule 62-204.800(8)(f), F.A.C., which implements the emission guidelines of 40 CFR 60 Subpart DDDD -

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

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Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units that Commenced Construction On or Before November 30, 1999. The compliance date for this subpart is the sooner of either (1) one year after “effective date” of EPA approval 111(d) plan or (2) February 7, 2018. NSPS Subpart DDDD is included in the appendices document. [FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines]

#### **C.3. Change of NSPS/NESHAP Applicability Status.**

- a. Waste-to-Fuel Switch. If the permittee combusts solid waste in the kiln, the kiln is subject to Subpart DDDD. If the permittee ceases to combust solid waste in the kiln, the permittee has the option of switching from compliance with Subpart DDDD to compliance with Subpart LLL. A permittee making this election must meet the following conditions:
  - (1) The permittee must first establish an “**effective date**” for the waste-to-fuel switch, which must be at least six (6) months after the date that the permittee ceased (or intends to cease) combusting solid waste in the kiln, consistent with 40 CFR 60.2710(a)(2), referenced under Rule 62-204.800(9)(f), F.A.C.
  - (2) The kiln must remain in compliance with DDDD, set forth in **Conditions C.32. through C.48.** below, until the “effective date” of the waste-to fuel switch.
  - (3) The permittee must provide the Department with 30 days’ advance notice prior to the “effective date” of the waste-to-fuel switch.
  - (4) The operator must be in compliance with NESHAP Subpart LLL on the “effective date” of the waste-to-fuel switch.
- b. Notification of Waste to Fuel Switch. The permittee’s 30-day advance notification to the Department regarding the “effective date” of a waste to fuel switch referenced in paragraph-above must identify:
  - (1) The date of the notice;
  - (2) The name of the owner or operator and the location of the Subpart DDDD kiln that will cease burning solid waste;
  - (3) The kiln is currently a DDDD unit, and Subpart LLL will become applicable as of the “effective date” of the waste-to-fuel switch;
  - (4) The fuel(s), non-waste material(s), and solid waste(s) the kiln is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the kiln will commence combusting;
  - (5) The date on which the kiln became subject to the currently applicable Subpart DDDD emission limits;
  - (6) The date the permittee ceased combusting solid waste in the kiln; and
  - (7) The “effective date” of the waste-to-fuel switch, consistent with **Specific Conditions C.3.a.** above.
- c. If the permittee meets these conditions, the kiln will become subject to the applicable requirements of NESHAP Subpart LLL on the “effective date” of the waste-to-fuel switch. **Conditions C.19. through C.31.** below, reflecting the Subpart LLL requirements, will apply to the kiln instead of the Subpart DDDD requirements reflected in **Conditions C.32. through C.48.**
- d. Re-Firing Solid Waste. Compliance Requirements. Following a waste-to-fuel switch and the applicability of LLL, if the permittee begins using materials identified as a solid waste in the kiln, the kiln will again be subject to the Subpart DDDD requirements of Rule 62-204.800(9)(f), F.A.C. The “effective date” of the fuel-to-waste switch is the first day that the permittee introduces (or re-introduces) solid waste into the kiln. The permittee must complete all initial compliance demonstrations for any LLL standards that are applicable to the kiln before the permittee commences or recommences combustion of solid waste. In addition, the permittee must provide 30 days’ prior notice of the fuel-to-waste switch “effective date.” After the completion of any required testing and the thirty-day notice, Subpart LLL requirements will no longer apply.

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- e. All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the “effective date” of the waste-to-fuel or fuel-to-waste switch.
  - f. All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the “effective date” of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy testing for DDDD CEMS need not be repeated if that testing was previously performed consistent with section 112 monitoring requirements or monitoring requirements.
- [Rule 62-204.800(9)(f), F.A.C., referencing 40 CFR 60.2710(a)]

#### C.4. **Operating Capacity.**

- a. **Kiln Permitted Capacity.** The Kiln clinker production rate shall not exceed 125 tons/hour on a 24-hour rolling average. On an annual basis 12-month, monthly rolling total, the clinker production rate shall not exceed 880,000 tons/year. The clinker production rate will be determined as a function of the preheater dry feed rate.
- b. The preheater dry feed rate is the mass of material (on a dry basis) entering the preheater/kiln. Continuous operation is allowed (8,760 hours per year) as long as the 880,000 TPY clinker limit is not exceeded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0010087-055-AC (PSD-FL-228I and 350G)]

#### C.5. **Dry Sorbent Injection (DSI) System.** The owner or operator is authorized to operate one DSI system and ancillary equipment which will vent to the kiln exhaust; the system is considered part of the equipment.

[Permit No. 0010087-065-AC]

#### C.6. **Traditional Fuels.** The permittee is authorized to fire the following fuels in the kiln: coal, petroleum coke, natural gas, unused No. 2 fuel oil, propane, fly ash, and whole tires. The burning of RCRA hazardous waste or used oil is prohibited. *{Permitting Note: This condition clarifies that the pyro-processing kilns are not limited to firing only “bituminous” coal and is capable of firing other coals.}*

[Permit Nos. 0010087-015-AC, 0010087-031-AC, 0010087-051-AC, and 0010087-055-AC (PSD-FL-228I & 350G)]

#### C.7. **Oil.** The permittee is authorized to fire the following fuel oils in the kiln:

- a. The kiln is authorized to fire distillate oil, on-specification and off-specification used oil with a sulfur content of 0.5%.
- b. The kiln is authorized to fire off-specification used oil up to a total halogen content of 4,000 ppm under the rebuttable presumption that the off-specification used oil does not contain hazardous waste.
- c. The kiln is authorized to fire propane and distillate oil with no limitations on the amount of each fuel fired and when these fuels are being fired in the kiln.

[Permit No. 0010087-059-AC; and Rule 62-210.200(PTE), F.A.C.]

#### C.8. **On-Specification Used Oil.** On-specification used oil shall not exceed the following allowable levels and specifications:

| Constituent/Property | Allowable Level |
|----------------------|-----------------|
| Arsenic              | 5 ppm maximum   |
| Cadmium              | 2 ppm maximum   |
| Chromium             | 10 ppm maximum  |

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**Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Lead                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 100 ppm maximum   |
| Flash Point                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 100°F Minimum     |
| Total Halogens                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 4,000 ppm maximum |
| Notes:<br>1. Applicable standards for the burning of used oil containing polychlorinated biphenyls (PCB) are imposed by 40 CFR 761.20(e).<br>2. The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).<br>3. Used oil containing more than 1,000 parts per million (ppm) total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR 266 Subpart H when burned for energy recovery unless the presumption of mixing can be successfully rebutted. |                   |

- a. Records: The quantity of used oil accepted and the date of acceptance.
- b. Retention of Records: All records shall be maintained for at least 3 years.

[Chapter 62-710, F.A.C.-and 40 CFR 279 Subpart B, Permit No. 0010087-059-AC]

**C.9. Off-Specification Used Oil.** The off-specification used oil shall meet the requirements of 40 CFR 279 Subpart G including the following.

- a. Total Halogen Content: The total halogen content shall be below 1,000 ppm. The permittee may purchase off-specification used oil with total halogen concentration up to 4,000 ppm under the rebuttable presumption that the off-specification used oil does not contain hazardous waste.
- b. Records: The quantity of used oil accepted and the date of acceptance.
- c. Retention of Records: All records shall be maintained for at least 3 years.

[Chapter 62-710.200(2), F.A.C.; 40 CFR 279 Subpart G; and, Permit No. 0010087-059-AC]

**C.10. Rebuttable Presumption of Off-Specification Used Oil.**

- a. Hazardous Waste Determination: To ensure that used oil is not hazardous waste under the rebuttable presumption, the permittee shall determine if the used oil contains above or below 1,000 ppm total halogens by:
  - (1) Testing the used oil; or
  - (2) Receiving the used oil from a processor/re-refiner subject to regulation under 40 CFR 279, Subpart F. The processor/re-refiner shall provide fuel specifications certifying the used oil meets the allowable levels and fuel specifications.
- b. Total Halogens > 1,000 ppm: If the used oil contains greater than or equal to (>) 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in 40 CFR 261, Subpart D. The permittee may rebut the presumption by demonstrating that the used oil does not contain hazardous waste by testing the used oil demonstrating that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 40 CFR 261, Appendix VIII.
  - (1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffin's, if they are processed, through a tolling arrangement as described in 40 CFR 279.24(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner or disposed.
  - (2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFC) removed from refrigeration units where the CFC are destined for reclamation. The rebuttable

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

presumption does apply to used oils contaminated with CFC that have been mixed with used oil from sources other than refrigeration units.

- c. **Prohibited.** The permittee shall not process, blend or mix any used oil on site to meet fuel specifications. [Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart and G; and, Permit No. 0010087-059-AC]

- C.11. Whole Tires.** Whole tires may be used as a fuel. Such tires shall be fed into the kiln system at the transition section between the base of the precalciner and the point where gases exit the kiln. The tire feeder mechanism shall consist of a rotary feeder, which seals the tire entry point from the atmosphere. The permitted feed rate shall not exceed 4.2 TPH (approximately 400 tires per hour). Before initiating tire firing, the gases exiting the kiln ahead of the calciner burner shall be maintained at a minimum of 1,440 degrees F for at least one hour.

[Rules 62-210.200(PTE), 62-210.200(203), and 62-213.410, F.A.C.; and, Permit Nos. AC01-267311/PSD-FL-228; 0010087-003-AC/PSD-FL-228A, 0010087-015-AC, and 0010087-55-AC/(PSD-FL-228I & 350G)]

### RAW MILL HEATER

- C.12. Standards for the Management of Used Oil Requirements.** The permittee shall comply with the applicable requirements of 40 CFR 279, Subpart A (Definitions), Subpart B (Applicability) and Subpart G (Standards for Used Oil Burners Who Burn Off-Specification Used Oil for Energy Recovery) adopted by reference in Rule 62-710.200(2), F.A.C. [Rule 62-710.200(2), F.A.C.; and 40 CFR 279 Subparts A, B and G] [Permit No. 0010087-059-AC]

- C.13. Raw Mill Air Heater Fuels.** The permittee is authorized to fire natural gas. Natural gas firing shall not exceed 40 MMBtu/hr in the Raw Mill Air Heater. The permittee is authorized to fire unused distillate oil with a maximum sulfur content of 0.5% in the raw mill air heater with no limitations on the amount of distillate oil fired in the air heater. The raw mill air heater is permitted to fire on-specification used oil with a maximum sulfur content of 0.5% and shall not exceed 1,573,000 gallons/year.

*{Permitting Note: The on-specification used oil limit is based on 286 gallons/hour and 5,500 hours/year. No other fuels are permitted to be fired in the Raw Mill Heater.}*

[Rule 62-213.410, F.A.C., Permit Nos. AC01-267311/PSD-FL-228 and-0010087-015-AC, Permit No. 0010087-059-AC]

### PERFORMANCE REQUIREMENTS

- C.14. Ammonia.**

- a. **SNCR System Malfunction.** Upon malfunction or unavailability of the SNCR system, the operator shall, as soon as practicable, effect a reducing atmosphere in the calciner or inject tires as needed to maintain NO<sub>x</sub> control.
- b. **Ammonia Concentration Limit.** The concentration of stored ammonia solutions shall be less than 20% by weight.

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

[Rule 62-210.650, F.A.C.; and, Permit No. 0010087-021-AC]

- C.15. Methods of Operation for the DSI System.** The DSI system shall inject sorbent between the kiln ID fan outlet and the main kiln baghouse primarily to control Hg emissions from the kiln. [Permit No. 0010087-065-AC]

- C.16. Authorized Sorbents.** The owner or operator is authorized to use activated carbon, sodium bicarbonate, hydrated lime, and sodium sesquicarbonate (trona) as sorbents for the DSI system. The owner or operator shall notify the Department of the use of a new sorbent (i.e., a sorbent not authorized by Permit No. 0010087-065-AC). Submit the notification to [DARM\\_Permitting@dep.state.fl.us](mailto:DARM_Permitting@dep.state.fl.us). [Permit No. 0010087-065-AC]

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*{Permitting Note: Per Rule 62-213.410, Changes Without Permit Revision, F.A.C ([Link to Rule](#)) the permittee may take advantage of this rule where appropriate.}*

**C.17. Dry Scrubber Operating Limits.** Compliance with HCl emissions limits in Rule 62-204.800(9)(f), F.A.C. shall be demonstrated by Performance test (Method 321 at appendix A of 40 CFR Part 63) or HCl CEMS if a wet scrubber or dry scrubber is not used, as specified in 40 CFR 60.2710(j). If the permittee uses a dry scrubber to comply with the emission limitations in Rule 62-204.800(9)(f), F.A.C., the permittee must measure the injection rate of each sorbent during the performance testing, if hydrogen chloride is not continuously monitored through an HCl CEMS. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate of each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. [Rule 62-204.800(9)(f), FAC; and 40 CFR 60.2675(g) & 60.2710(j)]

**C.18. Dry Scrubber Monitoring Requirements.** If the permittee uses a dry scrubber to comply with the emission limits in Rule 62-204.800(9)(f), F.A.C., the permittee must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating limits established during the hydrogen chloride performance test. [Rule 62-204.800(9)(f), FAC; and 40 CFR 60.2730(s)]

*{Permitting note: The injection rate and operating limits addressed in **Specific Conditions C.17 and C.18** only apply if injection of sorbent is used to demonstrate compliance with a DDDD pollutant that is not continuously monitored as described in 40 CFR 60, Subpart DDDD.}*

#### EMISSION LIMITATIONS AND STANDARDS

*{Permitting Note: Table 1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. The kiln emission rate includes fuel oil combustion emission of NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, PM<sub>10</sub>, VOC from the raw mill air heater. Two sections are provided below, LLL and DDDD. The following **Conditions C.19. (LLL) to C.31. (LLL)** apply only if the kiln unit is subject to NESHAP Subpart LLL. The following **Conditions C.32. (DDDD) to C.48. (DDDD)** apply only if the kiln unit is subject to NSPS Subpart DDDD. Requirements of 40 CFR 241 to identify a non-hazardous secondary material as a non-solid waste fuel is a requirement only if the facility is subject to LLL.}*

#### (LLL) EMISSION STANDARDS AND OPERATING LIMITS

**C.19. (LLL) Pollutant Emissions Limits.** Emissions shall not exceed the following limits for the following pollutants. Emissions from the raw mill air heater are included in the limits below.

| POLLUTANT | EMISSION LIMIT         |                                            | COMPLIANCE METHOD & AVERAGING TIME                             | BASIS               |
|-----------|------------------------|--------------------------------------------|----------------------------------------------------------------|---------------------|
| Opacity   | 10%                    |                                            | COMS/Annual Method 9<br>30 minutes                             | BACT <sup>1</sup>   |
| PM        | 0.23 lb/ton of clinker | BACT equivalent<br>25.9 lb/hr<br>94 ton/yr | RM-Up only<br>Annual Method 5<br>3-hr avg.                     | BACT <sup>1,2</sup> |
| PM        | 0.07 lb/ton clinker    |                                            | Periodic Method 5, 3-hr/<br>PM-CPMS, 30-kiln<br>operating days | LLL <sup>3</sup>    |

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|                            |                                                                         |                                               |                                                                |                      |
|----------------------------|-------------------------------------------------------------------------|-----------------------------------------------|----------------------------------------------------------------|----------------------|
| PM <sub>10</sub>           | 0.20 lb/ton clinker                                                     | BACT equivalent<br>22.1 lb/hr<br>80 ton/yr    | RM-Up only<br>Annual Method 5<br>3-hr avg.                     | BACT <sup>1,2</sup>  |
| SO <sub>2</sub>            | 0.16 lb/ton of clinker                                                  | BACT equivalent<br>17.7 lb/hour<br>64 ton/yr  | Annual Method 6 or 6C<br>3-hr avg.                             | BACT <sup>2,4</sup>  |
| NO <sub>x</sub>            | 2.45 lb/ton of clinker                                                  | BACT equivalent<br>271 lb/hour<br>980 ton/yr  | CEMS <sup>7</sup><br>30 day rolling avg.                       | BACT <sup>2</sup>    |
| CO                         | 2.50 lb/ton of clinker                                                  | BACT equivalent<br>276 lb/hour<br>1000 ton/yr | Quarterly Method 10<br>3-hr avg.                               | BACT <sup>2, 5</sup> |
| VOC                        | 0.11 lb/ton of clinker                                                  | BACT equivalent<br>11.8 lb/hour<br>43 ton/yr  | Method 25/25A,<br>THC CEMS is only for<br>reasonable assurance | BACT <sup>2</sup>    |
| THC                        | 24 ppmvd 7% O <sub>2</sub>                                              |                                               | CEMS<br>30-kiln operating days                                 | LLL <sup>3</sup>     |
| Mercury                    | 200 lb/yr                                                               |                                               | Fuels, Material Balance<br>12-month                            | BACT <sup>6</sup>    |
|                            | 55 lb/mmton clinker                                                     |                                               | CEMS or sorbent trap<br>30-kiln operating days                 | LLL <sup>3</sup>     |
| HCl                        | 3 ppmvd 7% O <sub>2</sub>                                               |                                               | CEMS or surrogate<br>30-kiln operating days                    | LLL <sup>3</sup>     |
| Dioxin/Furan               | 0.4 (< 400 degF)<br>0.2 (> 400 degF)<br>ng/dscm 7% O <sub>2</sub> (TEQ) |                                               | 30-month Method 23<br>9-hr avg.                                | LLL <sup>3</sup>     |
| Baghouse inlet Temperature | Baghouse Temperature (T) < T<br>during<br>Dioxin/Furan Tests            |                                               | Continuous, 180-min avg<br>establish each D/F tests            | LLL <sup>3</sup>     |

[1] Opacity has an annual VE test requirement. PM compliance demonstration may suffice for PM<sub>10</sub> compliance demonstration. Once LLL or DDDD demonstrates compliance by PM CPMS then opacity by COMS not required. PM CPMS shall continuously monitor PM emissions in Permit No. 0010087-055-AC. PM emissions compliance, monitoring requirements and tests shall be in accordance with 40 CFR 63.1348(b)(2); 40 CFR 63.1350(b)(i)-(iv) and 40 CFR 63.1349(b)(i)-(vi)

[2] BACT limits established in Permit No. 0010087-006-AC (PSD-FL-228C). VOC BACT limit revised in 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)).

CO BACT Limit and averaging time revised in 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)). SO<sub>2</sub> BACT limit compliance demonstration by annual stack testing per 0010087-054-AC (PSD-FL-228H and PSD-FL-350F).

[3] See NESHAP Subpart LLL **Conditions, C.19. (-LLL) to C.31. (LLL)** for more details. 30 kiln-operating days is defined in 40 CFR 63.1341. Oxygen monitoring is required for NESHAP LLL compliance to correct to 7% O<sub>2</sub>. LLL

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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pollutants compliance by CMS shall exclude all data during periods of startup and shutdown per 40 CFR 63.1343(a). HCl compliance may be demonstrated by surrogate monitoring by SO<sub>2</sub> CEMS or by minimal sorbent injection rate. See 40 CFR 63.1349(b)(6), CFR 63.1350(l)(3), and 63.1350(m) for details on HCl monitoring requirements. CEMS shall be certified per 40 CFR 60 App. F. HCl emissions monitoring requirements shall be in accordance with 40 CFR 63.1350(l). Dioxin/furans emissions compliance, monitoring requirements and tests shall be in accordance with 40 CFR 63.1348(a)(3); 40 CFR 63.1350(g)(1) - (5) and 40 CFR 63.1349(b)(3).

[4] Compliance with SO<sub>2</sub> limit shall be demonstrated by annual stack test. [0010087-054-AC (PSD-FL-228H and PSD-FL-350F)]

[5] Continuous process monitors for CO and/or O<sub>2</sub> to optimize combustion conditions for pollution control shall be part of the process. CO in-stack emission compliance testing shall be performed on a quarterly basis using EPA Method 10. The quarterly CO test reports shall be filed with the Department in accordance with Rule 62-297.310(8), F.A.C. [Air Permit No. 0010087-015-AC]

[6] Compliance with NESHAP LLL suffices to demonstrate compliance to the Hg BACT limit. Hg material balance determined by raw materials and fuels entering the process. LLL Hg limit compliance presumes Hg BACT compliance. Mercury initial emissions compliance, continuous emissions compliance and monitoring requirements shall be in accordance with 40 CFR 63.1348(a)(5), 40 CFR 63.1348(b)(7) and 40 CFR 63.1350(k).

[7] NO<sub>x</sub> – The continuous emission monitor (CEM) data shall be used to demonstrate compliance with the kiln emissions limits. The CEM calibration and maintenance shall meet the applicable requirements of 40 CFR 60, Appendix B and F.

*{Permitting Note: VOC emissions shall be monitored using a THC CEMS. The THC CEMS is an indicator of emission levels of VOC but does not demonstrate compliance. The method of compliance is by Method 25/25A.}*

[Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. 0010087-006-AC (PSD-FL-228C), 0010087-049-AC PSD-FL 228G and PSD-FL-350E, 0010087-054-AC, 0010087-055-AC, NESHAP Subpart LLL; 40 CFR 63.1343]

#### (LLL) MONITORING AND COMPLIANCE PROVISIONS

- C.20. (LLL) Continuous Compliance.** For purposes of NESHAP 40 CFR 63 Subpart LLL continuous compliance with the PM, Hg, HCl, and THC, standards of 40 CFR 63.1343 **Specific Condition No. C.19.**, shall be demonstrated using data collected from PM, Hg, and HCl CEMS/CPMS/sorbent traps and flow rate monitoring in accordance with 63.1348, and 63.1350(b), (i), (k), (l), and (n).

[40 CFR 63.1343(a)]

- C.21. (LLL) Baghouse Temperature Monitor.** A continuous temperature monitor shall be calibrated, operated, and maintained at the inlet to the baghouse for the kiln system exhaust in accordance with the Dioxin/Furan (D/F) monitoring requirements of 40 CFR 63 Subpart LLL 40 CFR 63.1350(g).

[40 CFR 63.1350(g)(1) – (5)]

- C.22. (LLL) Development and Submittal (Upon Request) of Monitoring Plans.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements in 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petition the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o)(1) – (6), and 40 CFR 63.8(f).

[40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) – (6)]

- C.23. (LLL) NESHAP Startup and Shutdown Requirements.** During periods of startup and shutdown the requirements listed in a. through d. of this Condition must be met.

- a. During startup any one or combination of the following clean fuels must be used: 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.

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- b. Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.
- c. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300 degrees Fahrenheit (five-minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.
- d. Records as specified in 40 CFR 63.1355 **Specific Condition No. C.31.**, must be kept during periods of startup and shutdown.

[Rule 62-204.800, F.A.C.; and, 40 CFR 63.1346(g)]

**C.24. (LLL) Allowable Data Exclusions.** NESHAP 40 CFR 63 LLL compliance data exclusions must only abide by the following definitions as defined in NESHAP 40 CFR 63 LLL:

- a. *Startup* means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.
- b. *Shutdown* means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

[40 CFR 63.1341]

**C.25. (LLL) Clinker Production Monitoring Requirements.** The permittee must determine hourly clinker production per 40 CFR 63.1350(d)(1)(i) – (ii), (2) – (4). [40 CFR 63.1348(b)(1)(iv)]

**C.26. (LLL) D/F Compliance Testing.** Dioxins/furans (D/F) tests shall be conducted in accordance with the provisions of 40 CFR 63.1348(a)(3) and 63.1349(b)(3). Frequency of testing shall be in accordance with the requirements of 40 CFR 63.1348(c) and 63.1349(c) (i.e., every 30 months, or upon making a change in operations that may adversely affect compliance with the standard. [Rules 62-297.310(8), F.A.C.; 40 CFR 60.8; 40 CFR 63.1348 and 1349(b)]

**C.27. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Compliance Authority and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of 40 CFR 63.1343, 40 CFR 63.1345, and 40 CFR 63.1346. The facility operations and maintenance plan must address periods of startup and shutdown.
- 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. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.
- c. 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.

[40 CFR 63.1347(a)(1) – (3)]

*{Permitting Note: In the event the oxygen monitor is not operating a default stack gas oxygen concentration of 16 percent may be applied.}*

#### **(LLL) NOTIFICATION, REPORTING AND RECORDKEEPING**

**C.28. (LLL) Notifications.** Each owner or operator subject to the requirements of LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

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- a. Notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e).
  - b. Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.
  - c. Notification of compliance status, as required by 40 CFR 63.9(h).
  - d. Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of 40 CFR 63.7(b) and 40 CFR 63.9(e) do not apply to retesting required for exceedances.
- [40 CFR 63.1353]

- C.29. (LLL) Semiannual Report.** The owner or operator shall submit a summary report semiannually to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). [Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1354(b)(8-10)]
- C.30. (LLL) Continuous Flow Rate Monitoring System.** The facility must install, operate, calibrate, and maintain instruments, according to the requirements in 40 CFR 63.1350(n)(1), (2), (4) – (10), for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has pounds per ton of clinker unit and that is required to be monitored by a CEMS. [40 CFR 63.1350(n)(1), (2) (4) – (10)]
- C.31. (LLL) Recordkeeping Requirements.** The owner or operator shall maintain files of all information (including all reports and notifications) required by required by 40 CFR 63.1355(a) – (h) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche. [40 CFR 63.1355(a) – (h)]

#### BEGINNING OF DDDD CONDITIONS

#### EMISSION LIMITATIONS AND OPERATING LIMITS

- C.32. (DDDD) NSPS - Pollutant Emissions Limits.** Emissions shall not exceed the following limits for the following pollutants. Emissions from the raw mill air heater are included in the limits below.

| POLLUTANT        | EMISSIONS LIMIT           |                                               | COMPLIANCE METHOD & AVERAGING TIME                                                                                           | BASIS                                                    |
|------------------|---------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Opacity          | 10%                       |                                               | COMS/Annual Method 9<br>30-minutes                                                                                           | BACT <sup>1</sup>                                        |
| PM               | 023 lb/ton of<br>clinker  | BACT equivalent<br>25.9 lb/hr<br>94 ton/year  | RM-Up only<br>Annual Method 5<br>3-hr avg.                                                                                   | BACT <sup>1, 2, 6</sup>                                  |
|                  | 0.07 lb/ton of clinker    |                                               | 30-kiln operating day rolling<br>of CPMS monitoring and<br>Annual (or greater) Method<br>5, Raw Mill-up and Raw Mill<br>down | Rule 62-<br>204.800(9)(f)5.b.,<br>F.A.C. <sup>3, 9</sup> |
| PM <sub>10</sub> | 0.20 lb/ton of<br>clinker | BACT<br>equivalent<br>22.1 lb/hr<br>80 ton/yr | Annual Method 5<br>3 hr avg                                                                                                  | BACT <sup>2,7</sup>                                      |

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|                         |                                                                                                                                                                                    |                                               |                                                                                 |                         |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------------------------------------|-------------------------|
| SO <sub>2</sub>         | 0.16 lb/ton of clinker                                                                                                                                                             | BACT equivalent<br>17.7 lb/hour<br>64 ton/yr  | Annual Method 6 or 6C<br>3 hr avg                                               | BACT <sup>2, 4, 7</sup> |
|                         | 600 parts per million dry volume (ppmvd) @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                               |                                               | CEMS, 720-kiln operating hours, or Annual or greater Method 6 or 6C<br>3-hr avg | DDDD <sup>3, 9</sup>    |
| NO <sub>x</sub>         | 2.45 lb/ton of clinker                                                                                                                                                             | BACT equivalent<br>271 lb/hour<br>980 ton/yr  | CEMS<br>30 day rolling avg                                                      | BACT <sup>2,7</sup>     |
|                         | 630 ppmvd @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                                                              |                                               | CEMS, 720-kiln operating hours, or Annual or greater Method 7 or 7E<br>3 hr avg | DDDD <sup>3, 9</sup>    |
| CO                      | 2.50 lb/ton of clinker                                                                                                                                                             | BACT equivalent<br>276 lb/hour<br>1000 ton/yr | Quarterly Method 10<br>3 hr avg                                                 | BACT <sup>2,5,7</sup>   |
|                         | 790 ppmvd @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                                                              |                                               | CEMS, 720-kiln operating hours, or Annual or greater Method 10<br>3 hr avg      | DDDD <sup>3,9</sup>     |
| VOC                     | 0.11 lb/ton of clinker                                                                                                                                                             | BACT equivalent<br>11.8 lb/hour<br>43 ton/yr  | Method 25/25A,<br>THC CEMS is only for reasonable assurance                     | BACT <sup>2</sup>       |
| Mercury                 | 200 lb/yr                                                                                                                                                                          |                                               | Fuels, Material Balance<br>12-month                                             | BACT <sup>2, 8</sup>    |
|                         | 58 lb/mmton clinker<br>(after Subpart DDDD Compliance Date)                                                                                                                        |                                               | CEMS or sorbent trap<br>720-kiln operating hours                                | DDDD <sup>6,9</sup>     |
| Hydrochloric acid (HCl) | 3 ppmvd @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                                                                |                                               | CEMS or surrogate<br>720-kiln operating hours                                   | DDDD <sup>3,9</sup>     |
| Dioxin/Furan            | Total mass basis: 1.3 ng/dscm @ 7% O <sub>2</sub> ,<br><i>or</i><br>Toxic Equivalent (TEQ) basis:<br>0.075 ng TEQ/dscm @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date) |                                               | Annual or greater Method<br>23                                                  | DDDD <sup>3,9,11</sup>  |
| Cadmium                 | 0.0014 mg/dscm @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                                                         |                                               | Annual or greater Method<br>29                                                  | DDDD <sup>3,9,10</sup>  |
| Lead                    | 0.014 mg/dscm @ 7% O <sub>2</sub><br>(after Subpart DDDD Compliance Date)                                                                                                          |                                               |                                                                                 |                         |

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

- [1] PM compliance demonstration may suffice for PM10 compliance demonstration. Once LLL or DDDD demonstrates compliance by CPMS then opacity by COMS not required.
- [2] Original BACT limits revised in Permit No. 0010087-006-AC (PSD-FL-228C). VOC BACT limit revised in 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))). SO<sub>2</sub> BACT limit compliance demonstration by annual stack testing per Permit No 0010087-054-AC.
- [3] The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction. See NSPS Subpart DDDD **Specific Condition Nos. C.32. (-DDDD) to C.48.(-DDDD)** for more details. CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. Operate all CEMS in accordance with the applicable procedures under appendices B and F of 40 CFR 60. [40 CFR 2710(U)]
- [4] Compliance with SO<sub>2</sub> limit shall be demonstrated by annual stack test. [0010087-054-AC]
- [5] Continuous process monitors for CO and/or O<sub>2</sub> to optimize combustion conditions for pollution control shall be part of the process. CO in-stack emission compliance testing shall be performed on a quarterly basis using EPA Method 10. The quarterly CO test reports shall be filed with the Department in accordance with Rule 62-297.310(8), F.A.C. [Air Permit No. 0010087-015-AC]
- [6] Compliance with DDDD-111(d) plan PM, Hg limit suffices to demonstrate compliance to the PM, PM10 and Hg BACT limits.
- [7] Demonstration of compliance to the current Title V permit limits will also demonstrate compliance to CISWI limits of NO<sub>x</sub>, CO and SO<sub>2</sub>. **(DDDD) CO, NO<sub>x</sub> and SO<sub>2</sub> compliance.** Compliance may be demonstrated by using CEMS or periodic stack testing per 40 CFR 60.2710(b), 40 CFR 60.2710(g)(1) and (2).
- [8] Hg BACT limit determined by material balance determined by raw materials and fuels entering the process. (See **Condition C.19. (DDDD)** Hg limit compliance presumes Hg BACT compliance.
- [9] Subpart DDDD compliance date is the sooner of a) one year after “effective date” of EPA approval 111(d) plan, or (b) February 7, 2018.
- [10] The facility is conducting stack tests to demonstrate compliance at the frequency as stated in **Condition C.41. (DDDD).**
- [11] Determine TEQ and mass-based D/F values per 40 CFR 60.2690(G) and (J), respectively. Dioxin/furans emissions TEQ and TMB can be determine by following the procedures in accordance with 40 CFR 60.2690(g)(1) - (4) and 40 CFR 60.2690(j)(1) - (3).

[Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. 0010087-006-AC (PSD-FL-228C); 0010087-049-AC PSD-FL 228G and PSD-FL-350E, 0010087-054-AC, 0010087-055-AC; 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H)); 40 CFR 60.2710(a)(1) and (b)]

#### **(DDDD) PERFORMANCE TESTING**

**C.33. (DDDD) PM CPMS Requirements.** If the facility uses a PM CPMS to demonstrate compliance, the facility must establish the PM CPMS operating limit and determine compliance with it according with 40 CFR 60.2675(i)(1) - (5). [40 CFR 60.2675(i)(1) - (5)]

**C.34. (DDDD) Initial and Annual Performance Testing.**

- All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.
- The facility must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in 40 CFR 60.2740(b)(1)) **Specific Condition No. C.46.**, and the types of waste burned during the performance test.
- All performance tests must be conducted using the minimum run duration specified in tables 2 and 6 through 9 of 40 CFR 60 Subpart, DDDD or as per the 111(d) Plan based on FDEP rule 62-204.800(9)(f), F.A.C.

[40 CFR 60.2690(a), (b), (c); and FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines 40 CFR 60 Subpart DDDD emission guidelines]

**C.35. (DDDD) Date of Initial Performance Test.**

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

- a. The initial performance test must be conducted no later than 180 days after the final compliance date of February 7, 2018.
- b. If the facility commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility and the facility conducted a test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, the facility does not need to retest until 6 months from the date the facility reintroduces that solid waste.
- c. If the facility commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility and the facility have not conducted a performance test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, the facility must conduct a performance test within 60 days from the date the facility reintroduces solid waste.

[40 CFR 60.2705(a), (b), (c)]

**C.36. (DDDD) Date of Initial Air Pollution Control Device Inspection and Annual Air Pollution Control Device Inspection.**

- a. The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI unit reaches the charge rate at which it will operate, but no later than 180 days after the final compliance date for meeting the amended emission limitations.
- b. Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed.
- c. On an annual basis (no more than 12 months following the previous annual air pollution control device inspection).

[40 CFR 60.2706(a), (b); and 40 CFR 60.2716]

**(DDDD) CONTINUOUS COMPLIANCE**

**C.37. (DDDD) Exemptions during Performance Testing.** Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in **Table C.32 - DDDD** constitutes a deviation from the operating limits established under DDDD, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. [40 CFR 60.2710(c)]

**C.38. (DDDD) Periodic Performance Tests (D/F, Pb, Cd, HCl).** For waste-burning kilns, the facility must conduct an annual performance test for the pollutants (except mercury and particulate matter, and hydrogen chloride if no acid gas wet scrubber is used) listed in table 8 of Subpart DDDD. If the facility does not use an acid gas wet scrubber or dry scrubber, the facility must determine compliance with the hydrogen chloride emissions limit according to the requirements of 40 CFR 60.2710(j)(1). [40 CFR 60.2710(j)(1) and (2)]

**C.39. (DDDD) Hg Monitoring.** Hg monitoring must be performed as stated in the State 111(d) Plan per FDEP rule 62-204.800(9)(f), F.A.C. [FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines 40 CFR 60 Subpart DDDD emission guidelines]

**C.40. (DDDD) Interval of Annual Performance Tests.**

Conduct annual performance tests between 11 and 13 months of the previous performance test. The facility may conduct a repeat performance test at any time to establish new values for the operating limits. The facility must repeat the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance. [40 CFR 60.2715 and 40 CFR 60.2725]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

**C.41. (DDDD) Performance Testing Less Often.** At a minimum, the facility must conduct annual performance tests per **40 CFR 2715 (Specific Condition No. C.40.)**, with the following exceptions:

- a. The facility may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward, as specified in **40 CFR 60.2725 (Specific Condition No. C.40.)**.
- b. The facility must repeat the performance test within 60 days of a process change, as defined in **40 CFR 60.2875 (Specific Condition No. C.43.)**;
- c. If the initial or any subsequent performance test for any pollutant in table above demonstrates that the emission level for the pollutant is no greater than the emission level specified in **(1) of this Specific Condition** and the facility are not required to conduct a performance test for the pollutant in response to a request by the Administrator or a process change (see “process change” definition below), the facility may elect to skip conducting a performance test for the pollutant for the next 2 years.

The facility must conduct a performance test for the pollutant during the third year and no more than 37 months following the previous performance test for the pollutant. For cadmium and lead, both cadmium and lead must be emitted at emission levels no greater than their respective emission levels specified in **(1) of this Specific Condition** for the facility to qualify for less frequent testing:

- (1) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit given in Table 8 of this Subpart DDDD; and
  - d. If the facility is conducting less frequent testing for a pollutant as provided above and a subsequent performance test for the pollutant indicates that the DDDD unit does not meet the emission level specified in (1) above the facility must conduct annual performance tests for the pollutant according to the schedule specified above until the facility qualify for less frequent testing for the pollutant. Process change means any of the following physical or operational changes:
    - (1) A physical change (maintenance activities excluded) to the DDDD unit which may increase the emission rate of any air pollutant to which a standard applies;
    - (2) An operational change to the DDDD unit where a new type of non-hazardous secondary material is being combusted;
    - (3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the DDDD unit (e.g., replacing an electrostatic precipitator with a fabric filter); and
    - (4) An operational change to the air pollution control devices used to comply with the emission limits for the affected DDDD unit (e.g., change in the sorbent injection rate used for activated carbon injection).
- [40 CFR 60.2720(a); and 40 CFR 60.2875]

**C.42. (DDDD) Monitoring Equipment and Monitoring Parameters.**

- a. For waste-burning kilns not equipped with a wet scrubber or dry scrubber, in place of hydrogen chloride testing with EPA Method 321 at 40 CFR part 63, appendix A, an owner or operator must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions, as specified in **40 CFR 60.2710(j) Specific Condition No. C.38.**, discharged to the atmosphere and record the output of the system.
  - b. To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of either a particulate matter CEMS or a particulate matter CPMS for conducting the particulate matter annual performance test and other CMS monitoring for PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).
  - c. Waste-burning kilns must install, calibrate, maintain, and operate a mercury CEMS as specified in **40 CFR 60.2710(j)(2) Specific Condition No. C.38.**
  - d. To demonstrate continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a CEMS for the nitrogen oxides annual performance test to demonstrate compliance.
- [40 CFR 60.2730(g-h) and (k) and 40 CFR 60.2710(j)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

**C.43. (DDDD) Allowable Data Exclusions.** CEMS data during startup and shutdown, as defined in this Subpart DDDD, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.

- a. *Startup* means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.
- b. *Shutdown* means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

[40 CFR 60.2875]

**C.44. (DDDD) Control Equipment Inspections.** If the facility uses an air pollution control device to meet the emission limitations in this subpart, the facility must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:

- c. Inspect air pollution control device(s) for proper operation; and
- d. Develop a site-specific monitoring plan according to the requirements in 40 CFR 60.2710(l) of this Specific Condition. This requirement also applies to the facility if the facility petition the EPA Administrator for alternative monitoring parameters under 40 CFR 60.13(i).
- e. For each CMS required in this section, the facility must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of (l) that addresses (l)(1)(i) through (vi) of this Specific Condition:
  - (1) The facility must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the continuous monitoring system:
    - (i). Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);
    - (ii). Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems;
    - (iii). Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations);
    - (iv). Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 60.11(d);
    - (v). Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 60.13; and
    - (vi). Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 60.7(b),(c), (c)(1), (c)(4), (d), (e), (f) and (g).
  - (2) The facility must conduct a performance evaluation of each continuous monitoring system in accordance with the site-specific monitoring plan.
  - (3) The facility must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.

[40 CFR 60.2710(k-l)]

#### **(DDDD) OPERATOR TRAINING AND QUALIFICATION**

**C.45. (DDDD) Operator Training and Qualifications.**

- a. No CISWI unit can be operated unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI unit operators are temporarily not accessible, the facility must follow the procedures in 40 CFR 60.2665.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

- b. Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in **c. of this Specific Condition.**
- c. Training must be obtained by completing an incinerator operator training course as stated in 40 CFR 60.2635.
- d. The operator training course must be completed by the later of:
  - (1) February 7, 2018;
  - (2) Six months after CISWI unit startup; and
  - (3) Six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit.
- e. To maintain qualification, the facility must complete an annual review or refresher course covering, at a minimum, the five topics described in 40 CFR 60.2350(a) – (e).
- f. Annual review or refresher requirements are described in **e.**, above. Documentation must be available at the facility and readily accessible for all CISWI unit operators that addresses in 40 CFR 60.2660(a)(1) - (10).  
[40 CFR 60.2635(a), 60.2640(a), (b), and (c), 60.2650 (a) – (e), 60.2660(a), (b), (c)(1) – (3), 60.2655, and 60.2665]

#### (DDDD) RECORDKEEPING AND REPORTING

**C.46. (DDDD) Records.** The facility must maintain the items as applicable as specified below for a period of at least 5 years:

- a. Calendar date of each record;
- b. Records of the data described below:
  - (1) The DDDD unit charge dates, times, weights, and hourly charge rates;  
*{Permitting note: Because permittee uses a NO<sub>x</sub> CEMS for monitoring compliance, monitoring of charge rate, secondary chamber temperature and reagent flow for selective noncatalytic reduction is not required per 40 CFR 60.2730(k).}*
  - (2) For affected CISWI units that establish operating limits for controls other than wet scrubbers under 40 CFR 60.2675(d) through (g) or 40 CFR 60.2680, the facility must maintain data collected for all operating parameters used to determine compliance with the operating limits.
  - (3) If a fabric filter is used to comply with the emission limitations, the facility must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. The facility must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in 40 CFR 60.2675(c).
- c. Identification of calendar dates and times for which data show a deviation from the operating limits in **Specific Condition No. C.32.** above or a deviation from other operating limits with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
- d. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.
- e. Records showing the names of DDDD unit operators who have completed review of the information in **40 CFR 60.2660(a)**, as required by Records showing the names of DDDD unit operators who have completed review of the information in 40 CFR 60.2660(b), including the date of the initial review and all subsequent annual reviews.
- f. Records showing the names of the DDDD operators who have completed the operator training requirements under Records showing the names of DDDD unit operators who have completed review of the information in 40 CFR 60.2635, met the criteria for qualification under Records showing the names of DDDD unit operators who have completed review of the information in 40 CFR 60.2645, and maintained or renewed their qualification under 40 CFR 60.2650, or 40 CFR 60.2655. Records must include

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.

- g. For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
- h. Records of calibration of any monitoring devices as required under 40 CFR 60.2730.
- i. Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
- j. The information listed in 40 CFR 60.2660(a).
- k. On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).
- l. Maintain records of the annual air pollution control device inspections that are required for the kiln, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency.
- m. For continuously monitored pollutants or parameters, the facility must document and keep a record of the following parameters measured using continuous monitoring systems:
  - (1) All 1-hour average concentrations of SO<sub>2</sub>, NO<sub>x</sub>, CO, PM –CPMS, Hg, HCl DDDD limit emissions.  
The facility must indicate which data are CEMS data during startup and shutdown;
  - (2) All 1-hour average percent oxygen concentrations; and
- n. If the facility choose to stack test less frequently than annually, consistent with 40 CFR 60.2720(a) through (c) **Specific Condition No. C.41.a. – c.**, the facility must keep annual records that document that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.
- o. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- p. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- q. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- r. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) of this chapter, the facility must keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the facility combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the facility must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the facility must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the facility must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).

[40 CFR 60.2675(c); 40 CFR 60.2740 (a), (b)(1)(5-6), (e-m), (n)(2-4)(6)(8-9), (q-u)]

#### C.47. **(DDDD) Report Submittal – Table of Required Reports.**

| Report              | Due date                                                     | Contents                                                | Reference       |
|---------------------|--------------------------------------------------------------|---------------------------------------------------------|-----------------|
| Initial Test Report | No later than 60 days following the initial performance test | • Complete test report for the initial performance test | 40 CFR 60.2760. |

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                 |                                    |
|------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>• The values for the site-specific operating Limits</li> <li>• Installation of bag leak detection systems for fabric filters</li> </ul>                  |                                    |
| Annual Report                                                    | <p>No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report</p> <ul style="list-style-type: none"> <li>• Statement and signature by responsible official</li> <li>• Date of report</li> <li>• Values for the operating limits</li> <li>• Highest recorded 3-hour average and the lowest 3- hour average, as applicable, for each operating parameter recorded for the calendar year being reported</li> <li>• If a performance test was conducted during the reporting period, the results of the test</li> <li>• If a performance test was not conducted during the reporting period, a statement that the requirements of 40 CFR 60.2720(a) were met</li> </ul> | Name and address                                                                                                                                                                                | 40 CFR 60.2765 and 40 CFR 60.2770. |
| Annual Report                                                    | <p>Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks. If the facility is conducting performance tests once every 3 years consistent with 40 CFR 60.2720(a), the date of the last 2 performance tests, a comparison of the emission level the facility achieved in the last 2 performance tests to the 75 percent emission limit threshold required in 40 CFR 60.2720(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions</p>                                                                                                                                                                                       | Name and address                                                                                                                                                                                | 40 CFR 60.2765 and 40 CFR 60.2770  |
| Emission limitation<br>Or operating<br>Limit deviation<br>report | By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>• Dates and times of deviation</li> <li>• Averaged and recorded data for those dates</li> <li>• Duration and causes of each deviation and the</li> </ul> | 40 CFR 60.2775 and 40 CFR 60.2780. |

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

|  |  |                                                                                             |  |
|--|--|---------------------------------------------------------------------------------------------|--|
|  |  | corrective actions taken<br>• Copy of operating limit monitoring data and any test reports. |  |
|--|--|---------------------------------------------------------------------------------------------|--|

[40 CFR 60.2750 to 2760]

**C.48. (DDDD) Reports Form.**

- a. Within 60 days after the date of completing each performance test (*see* 40 CFR 60.8) required by this subpart, the facility must submit the results of the performance test or the continuous emissions monitoring system performance evaluation via EPA via the Compliance and Emissions Data Reporting Interface (CEDRI).
- b. For reporting pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, the facility must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.2795]

**BEGINNING OF BACT CONDITIONS - These conditions apply at all times regardless of LLL or DDDD.**

**MONITORING REQUIREMENTS**

**C.49. CEMS.** The permittee shall continuously monitor data collected by CEMS on Kiln 1 to demonstrate compliance with the emissions standards in the current Title V air operation permit. NO<sub>x</sub> emissions shall be continuously monitored by a CEMS. The THC CEMS serves as a surrogate for regulated VOC emissions. Mercury emissions shall be determined by sampling/analysis and material balance as specified in the Title V permit. The default value for the mercury content of tires and TDF shall be 0.0081 µg/g; no additional sampling/analysis is required. [Permit 0010087-054-AC (PSD-FL-228H and PSD-FL-350F)]

**C.50. Flow.** The Permittee shall install and operate a continuous flow monitor. [Rule 62-212.400(BACT), F.A.C.; and Permit No. AC01-267311/PSD-FL-228]

**OPERATIONS**

**C.51. Cement Kiln Dust (CKD).** The permittee shall “immediately collect” any spilled CKD to prevent fugitive emissions. [Permit No. AC01-267311/PSD-FL-228]

**C.52. Cement Kiln Dust (CKD).** Recycled Cement Kiln Dust (CKD) collected will be returned to the process. Any CKD not returned to the process shall be handled in accordance with Subtitle C rules under development by EPA. In the interim, the permittee shall develop a contingent management practices (CMP) for storage, sales or disposal of any CKD nor reused. The CMP is a condition of the operating permit. [Permit No. AC01-267311/PSD-FL-228; and 0010087-053-AC PSD-FL 228F and PSD-FL-350D]

**C.53. 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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

capacity in the permit. [Permit No. AC01-267311/PSD-FL-228; Rule 62-297.310, F.A.C.; and Permit 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

- C.54. NO<sub>x</sub> CEMS.** Permittee shall operate the NO<sub>x</sub> continuous monitoring equipment in accordance with the following:
- During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in Appendix B of 40 CFR 60, adopted by reference at 62-204.800(7)(e), F.A.C., data shall be collected concurrently by both the continuous emission monitors and the reference test methods. This monitor is subject to 40 CFR 60, Appendix B and F.
  - The span value of the continuous emission monitoring system shall be no less than 150 percent and no greater than 250 percent of the maximum permitted emissions of the inline kiln/raw mill.
  - The 24-hour daily arithmetic averages shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume (dry basis). The 1-hour arithmetic averages shall be calculated using the valid one-minute data points generated by the continuous emission monitoring system. At least two data points separated by a period of 15 minutes or more shall be used to calculate each 1-hour arithmetic average.
  - At a minimum, valid continuous emission monitoring system hourly averages shall be obtained for 95 percent of the operating hours per calendar quarter that the plant is producing clinker. If less than 95 percent of the hourly averages for the operating hours for any given calendar quarter is available, within 45 days following the end of the quarter, the permittee will provide a report with corrective actions.
  - All valid continuous emission monitoring system data must be used in calculating the emissions averages. When continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, for periods of time in excess of those described in specific condition 3(d), emissions data shall be obtained using other monitoring systems as approved by the Department to provide, as necessary, reasonable assurance.
  - In the event the plant is not in operation and there is no data, the system records zeroes. In the event the plant is firing fuel but producing no clinker, the system records pollutant mass emissions rates (i.e., lbs/hour), but the system records zeroes for the production-normalized emission rates (i.e., lbs/ton clinker). These zeroes are not included in the calculations of rolling averages, and are removed from the tabulation.
  - 30-day NO<sub>x</sub> rolling average is calculated through the integrated and automated data acquisition and handling system of the continuous emission monitoring system, according to the procedures in 40 CFR 60 Appendix A.

*{Permitting Note: Method 19 may be used in conjunction with the other methods to convert a concentration (ppmvd) to a mass emission rate (lb/hour).}*

[Permit No. 0010087-049-AC (PSD-FL-228G)]

- C.55. CO and/or O<sub>2</sub> Process Monitors.** Continuous process monitors shall be operated for CO and/or O<sub>2</sub> for use in determining plant operating parameters to optimize emissions of CO, NO<sub>x</sub>, and SO<sub>2</sub>. These monitors (CO and/or O<sub>2</sub>) are process monitors and are not subject to 40 CFR 60, Appendix B and F.

[Rule 62-212.400(BACT), F.A.C.; Permit No. AC01-267311/PSD-FL-228; and Permit No. 0010087-054-AC]

- C.56. 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.

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

*{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.}*

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

#### NOTIFICATIONS, RECORDS AND REPORTS

**C.57. Fuel Oil Sulfur Content.** Compliance with the fuel sulfur content of the distillate oil, on-specification and off-specification used oil shall be determined by a certified ASTM fuel oil analysis or certified by fuel supplier. Records shall be retained for at least 5-years and made available to the Department upon request.

[Permit No. 0010087-059-AC]

**C.58. Used Oil Shipment Records.** The permittee shall keep records of all used oil shipments accepted.

- a. Logs and shipping documents: The permittee shall keep records in a form of a log of invoices, manifests, bill of lading, or other shipping documents. Records for each shipment must include the following information:
  - (1) The name and address of the transporter who delivered the used oil;
  - (2) The name and address of the generator or processor/re-refiner from who sent the used oil;
  - (3) The EPA identification number of the transporter who delivered the used oil;
  - (4) The EPA identification number (if applicable) of the generator or processor/re-refiner who sent the used oil;
  - (5) The quantity of used oil accepted; and
  - (6) The date of acceptance.
- b. Retention of Records: All records and shipping documents shall be maintained on site for at least 3-years.

[Rule 62-710.200(2), F.A.C.; and 40 CFR 279, Subpart G; Permit No. 0010087-059-AC]

**C.59. Used Oil Total Halogen Concentration Records.**

- a. Total Halogens above or below 1,000 ppm: The permittee shall keep records in a form of a log the total halogen concentration of the used oil. The records shall include the following information:
  - (1) The date tested and test results; or
  - (2) The processor/re-refiner fuel specifications certifying the used oil meets the allowable levels and fuel specifications.
- b. Total Halogens > 1,000 ppm: The permittee shall keep records in a form of a log of the test results demonstrating that the off-specification used oil contains < 4,000 ppm total halogens and does not contain significant concentrations of halogenated hazardous constituents listed in 40 CFR 261, Appendix VIII.
- c. Retention of Records: All records shall be maintained on site for at least 3-years.

[Rule-62-710.200(2), F.A.C.; and-40 CFR 279, Subpart G; Permit No. 0010087-059-AC]

**C.60. Used Oil Certification requirements.**

- a. Notice Certification: Before the permittee accepts the first shipment of off-specification used oil fuel from a generator, transporter, or processor/re-refiner, the permittee shall provide to the generator, transporter, or processor/re-refiner a one-time written and signed notice certifying that:
  - (1) The permittee has notified the EPA stating the location and general description of his used oil management activities; and
  - (2) The permittee will burn the used oil only in the kilns.
- b. Certification Retention: The written and signed notice certification must be maintained for 3-years from the date the facility last receives shipment of off-specification used oil from that generator, transporter, or processor/re-refiner.

[Rule 62-710.200(2), F.A.C.; and 40 CFR 279, Subpart G; Permit No. 0010087-059-AC]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

##### C.61. Used Oil Notification Requirements.

- a. Identification Numbers: If the permittee has not previously complied with the notification requirements of RCRA section 3010 must comply with these requirements and obtain an EPA identification number.
- b. Mechanics of Notification: If the permittee has not received an EPA identification number shall obtain one by notifying the Regional Administrator of their used oil activity by submitting either:
  - (1) A completed EPA Form 8700-12 (To obtain EPA Form 8700-12 call RCRA/Superfund Hotline at 1-800-424-9346 or 703-920-9810); or
  - (2) A letter requesting an EPA identification number. Call the RCRA/Superfund Hotline to determine where to send a letter requesting an EPA identification number. The letter should include the following information:
    - (i). Burner company name;
    - (ii). Owner of the burner company;
    - (iii). Mailing address for the burner;
    - (iv). Name and telephone number for the burner point of contact;
    - (v). Type of used oil activity; and
    - (vi). Location of the burner facility.

[Rule 62-710.200(2), F.A.C.; and 40 CFR 279, Subpart G; Permit No. 0010087-059-AC]

##### C.62. Tires. The Permittee shall document the number of tires burned during a week and then establish storage and inventory based on a typical weekly requirement. The Permittee shall keep all documentation concerning tire inventory at the site and make the information available for Department review during inspections.

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

##### C.63. Coal, Tires, Raw Materials and Fuel Oil. An operating log shall be established and maintained for the weight of tires fired. The log shall include the daily tire usage, a monthly running total of the tire usage, and a cumulative annual running total to ensure that the annual limit is not exceeded. The log shall be maintained on file for at least five (5) years and shall be made available to the Department upon request. Records of the quantity and analysis of coal, petroleum coke, fly ash, natural gas, propane, fuel oil consumed and invoices for all fuel purchases along with logs for all raw materials and products shall be kept for a minimum of 5 years. Periods of startup, shutdown, and process malfunctions shall be noted on the same logs used for tires.

[Permit Nos. AC01-267311/PSD-FL-228 and 0010087-015-AC]

##### C.64. Mercury Compounds (as Hg). Monthly sampling and analysis shall be conducted of the raw mill feed, coal, petroleum coke, and fly ash and tires to demonstrate compliance with **Specific Condition C.19.**, SW-846 Method 7471 or an approved EPA, DEP or ASTM test methods shall be used and records shall be maintained for inspection. an approved EPA, DEP or ASTM test methods shall be used and records shall be maintained for inspection. The default value for the mercury content of tires and TDF shall be 0.0081 µg/g; no additional sampling/analysis is required.

*{Permitting Note: Mercury in Natural gas is approximately nil. Compliance with Hg LLL or DDDD limit will suffice for this condition.}*

[Permit Nos. AC01-267311/PSD-FL-228; Permit No. 0010087-015-AC; and Permit No. 0010087-051-AC]

##### C.65. Actual Emissions Reporting. Permit No. 0010087-055-AC was based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons/year on a calendar year basis, **for a period of 10 years following resumption of regular operations after the change.** Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of Permit No. 0010087-055-AC.

- b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
  - (1) The name, address and telephone number of the owner or operator of the major stationary source;
  - (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of Permit No. 0010087-055-AC;
  - (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
  - (4) Any other information that the owner or operator wishes to include in the report.
- c. The information required to be documented and maintained pursuant to Rules 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
- d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix C of Permit No. 0010087-055-AC. The permittee shall use the following methods in reporting the actual annual NO<sub>x</sub> and CO emissions for the In-Line Kiln/Raw Mill System - Line 1 (EU 003):
  - (1) The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of NO<sub>x</sub>.
  - (2) The permittee shall use data collected from the continuous parameter monitor and the quarterly CO in-stack emission compliance testing using EPA Method 10 to determine and report the actual annual emissions of CO.
  - (3) Unless otherwise approved by the Department, the permittee shall use the same emissions factors for reporting the actual annual emissions of NO<sub>x</sub> and CO as used in the application to establish baseline emissions.
  - (4) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

*{Permitting Note: Baseline emissions of NO<sub>x</sub> and CO were determined to be 386.4 tons/year and 919 tons/year, respectively.}*

[Permit No. 0010087-055-AC (PSD-FL-228I); and Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

#### GENERAL

- C.66. In the event that Fabric Filter catches come in contact with the soil, the waste shall be collected and a hazardous waste determination performed for metals in accordance with 40 CFR 262.11 and Rule 62-730.160, F.A.C. If the hazardous waste determination indicates that the material is hazardous, it shall be disposed of in a permitted hazardous waste disposal facility. If the material is not hazardous, the waste material is a solid waste as defined in Chapter 62-701, F.A.C. and must be disposed of in a permitted, lined landfill. The Permittee shall contact the Solid Waste Section, Northeast District Office, at telephone number (904) 256-1700, prior to disposal of the fugitive Fabric Filter or ESP catches which are to be disposed of as solid waste. [Permit No. AC01-267311/PSD-FL-228]
- C.67. **Continuous Monitoring System Data.** Monitor availability for each compliance CMS shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly summary emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection C. Emissions Unit 003 In-Line Kiln/Raw Mill System - Line 1

another report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

*{Permitting Note: Not meeting 95% CEMS availability in a single calendar quarter does not constitute a violation of this permit condition so long as the corrective actions stipulated by the condition, i.e., submittal of a plan identifying the problems and taking corrective action in the next calendar quarter, are implemented by the permittee. Different problem(s) arising in subsequent calendar quarters with regard to CEMS availability also does not necessarily constitute a violation of this permit condition so long as corrective actions have been taken addressing any previous problem(s) and the new problem(s) do not arise from lack of maintenance, training of personnel or other negligence by the permittee. In addition, circumstances complete outside the control of the permittee, e.g. lightning strikes, that prevent 95% CEMS availability in a calendar quarter do not constitute a violation of this permit condition. Finally, continuing problems from calendar quarter to calendar quarter related to the same problem(s) that causes CEMS availability to not meet the 95% criteria could also constitute a violation of this permit condition.}*

[Suffices for requirements of 40 CFR 60.2735]

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#### Subsection D. EU004 Clinker Handling - Line 1

Subsection D.: This section addresses the following emissions unit

| EU No. | Brief Description                                                                                                                                                                                                                                                                                                                             |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -004   | <b>Clinker Handling-Line 1.</b> This emissions unit includes the stack of the clinker cooler, designated by the applicant as <b>EP03</b> .<br>EP01: Clinker Cooler Discharge (L-01) and breaker conveyor<br>EP02: Clinker Silo North (L-06)<br>EP03: Clinker Cooler (fabric filter baghouse)<br>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). This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F).}*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**D.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) attached to and is part of this permit.

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**D.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to and is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

**D.3. 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.

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

**D.4. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year as long as the 880,000 ton per year clinker limit is not exceeded.

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

#### EMISSION LIMITATIONS AND STANDARDS

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

**D.5. Particulate Matter.**

a. Clinker Cooler (EP03).

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection D. EU004 Clinker Handling - Line 1

1. Particulate Matter emissions from the Clinker Cooler shall not exceed 0.08 pounds per ton of feed (dry basis) to the preheater and 0.14 pounds per ton of clinker. The PM shall also not exceed 15.4 lbs/hr and 56 tons/year. [0010087-006-AC (PSD-FL-228C)]

*{Permitting Note: Compliance with item (1) of PM emissions limits is assured by compliance with LLL PM limit of 0.07 lb/ton clinker.}*

2. Particulate Matter emissions from the Clinker Cooler shall not exceed 0.07 lb/ton of clinker.  
[40 CFR 63.1343(b)]

- b. Fabric Filters (EP01 and EP02). Particulate Matter emissions from the Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf).

[Rules 62.212.400(BACT) and 62-204.800(11)(b)48, F.A.C.; Permit Nos. AC01-267311/PSD-FL-228 and 0010087-006-AC (PSD-FL-228C); and Permit No. 0010087-055-AC ((PSD-FL-228I & 350G).]

*{Permitting Note: The averaging time for **Condition D.5.** is based on the run time of the specified test method. Previous PM10 BACT limit compliance is assured by compliance with LLL PM limit Permit No. 0010087-055-AC}*

#### **D.6. Visible Emissions.**

Clinker Cooler (EP03). Visible emissions from the Clinker Cooler shall not exceed 10% opacity. PM-CPMS compliance suffices for compliance to this limit.

Fabric Filters (EP01 and EP02). Visible emissions shall not exceed 5% opacity from the fabric filters.

[Rule 62.212.400(BACT), F.A.C.; Permit No. AC01-267311/PSD-FL-228; and Permit No. 0010087-055-AC (PSD-FL-228I & 350G)]

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

#### **TEST METHODS AND PROCEDURES**

*{Permitting Note: 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.7. Annual PM Compliance BACT and 40 CFR 63, Subpart LLL Tests.**

The Permittee shall also conduct a particulate matter emissions test at EP03 on an annual basis in accordance with 40 CFR 63.1349(b)(1) **Specific Condition No. D.11.**, once each calendar year (January 1 to December 31).

[Rules 62.204.800(11)(b)48 and 62-297.310, F.A.C.; 40 CFR 63.1350(b); Permit No. AC01-267311/PSD-FL-228; Permit Nos. 0010087-052-AC and 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

#### **D.8. PM CPMS (Clinker Cooler – EP03).** Continuous compliance with the opacity and PM limit shall be demonstrated with use of a PM CPMS.

[Permit No. 0010087-055-AC (PSD-FL-228I & 350G)]

#### **D.9. Annual Visible Emissions (EP01, EP02).**

- a. BACT Annual VE Test. Compliance with the 5% opacity limit shall be demonstrated in accordance with Method 9 of 40 CFR 60 Appendix A (30 minutes, five 6-minute averages).

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

[Rules 62-297.310(5)(b) F.A.C.; Permit No. AC01-267311/PSD-FL-228]

#### **D.10. (LLL) Periodic Visible Emissions - EPA Method 22 (EP01, EP02).**

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection D. EU004 Clinker Handling - Line 1

- a. Sources subject to a limitation on opacity under 40 CFR 63.1345 must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347) **Specific Condition No. D.19.** The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. D.15.**, and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)), if applicable.
1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A-7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A-4. The Method 9 performance test, of Appendix A-4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A-7, according to the requirements of (i) through (iv) **of this Specific Condition** for each such conveying system transfer point located within the building, or for the building itself, according to (vii) **of this Specific Condition**.
  7. If visible emissions from a building are monitored, the requirements of (i) through (iv) **of this Specific Condition** apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

#### D.10. Continued:

- b. *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under **a. of this Specific Condition**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(f)(1), (f)(3)]

#### D.11. **Particulate Matter (EP03 Clinker Cooler).**

PM Emissions Tests. The owner or operator of clinker cooler subject to limitations on PM emissions shall demonstrate initial compliance by conducting a performance test using Method 5 or Method 5I at appendix A-

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection D. EU004 Clinker Handling - Line 1

3 to part 60 of this chapter. The facility must also monitor continuous performance through use of a PM continuous parametric monitoring system (PM CPMS).

[Rules 62.212.400(BACT), 62-204.800(11)(b)48, F.A.C.; Permit No. AC01-267311/PSD-FL-228; and 40 CFR 63.1349(b)(1)]

#### PM CPMS

**D.12. (LLL) PM CPMS.** The facility must install, operate, calibrate, and maintain a PM CPMS in accordance with the requirements in 40 CFR 63.1350(b). The facility must conduct correlation testing to establish the parametric limit on the PM CPMS as described in (1)(i) – (iv) of 40 CFR 63.1350. The facility must determine continuous compliance as described in 40 CFR 63.1350(b).

[40 CFR 63.1349(b)(1)(i)(A) – (C); 63.1349(b)(1)(ii), (iii) - (vii); and 1350(b)]

**D.13. Particulate Matter (EP01, EP02).** Compliance with the visible emissions standard specified in **Condition D.6.**, shall be considered compliance with the particulate matter standard established in **Condition D.5.b.** Should the Department believe the particulate emission standards is not being met, the Department may require that compliance with the particulate emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.

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

**D.14. Startup and Shutdown Compliance.** Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1348(b)9.]

#### MONITORING REQUIREMENTS

##### NESHAP Requirements – Subpart LLL

**D.15. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petition to the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

#### EXCESS VISIBLE EMISSIONS

**D.16. Periodic Reporting.** As required by 40 CFR 63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring system performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit.

[40 CFR 63.1354(b)(8)]

#### REPORTING

**D.17. Summary Report Semiannual.** The owner or operator shall submit a summary report semiannually to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1354(b)(9); or 40 CFR 60.2795, 62.204.800(9)(f), F.A.C.]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection D. EU004 Clinker Handling - Line 1

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#### (LLL) MONITORING DOWNTIME AND MALFUNCTIONS.

**D.18.** If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

Reporting a failure to meet a standard due to a malfunction. For each failure to meet a standard or emissions limit caused by a malfunction at an affected source, the facility must report the failure in the semi-annual compliance report required by 40 CFR 63.1354(b)(9) **Specific Condition No. D.17**. The report must contain the date, time and duration, and the cause of each event (including unknown cause, if applicable), and a sum of the number of events in the reporting period. The report must list for each event the affected source or equipment, an estimate of the volume of each regulated pollutant emitted over the emission limit for which the source failed to meet a standard, and a description of the method used to estimate the emissions. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.1348(d), including actions taken to correct a malfunction.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1354(b)(10); and (c)]

**D.19. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
- b. Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above in D.10.b.*)

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347(a)(1) and (2)]

#### GENERAL

**D.20.** In the event that Fabric Filter catches come in contact with the soil, the waste shall be collected and a hazardous waste determination performed for metals in accordance with 40 CFR 262.11 and Rule 62-730.160, F.A.C. If the hazardous waste determination indicates that the material is hazardous, it shall be disposed of in a permitted hazardous waste disposal facility. If the material is not hazardous, the waste material is a solid waste as defined in Chapter 62-701, F.A.C. and must be disposed of in a permitted, lined landfill. The Permittee shall contact the Solid Waste Section, Northeast District Office, at telephone number (904) 256-1700, prior to disposal of the fugitive Fabric Filter or ESP catches which are to be disposed of as solid waste.

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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection E. EU005 Finish Grinding Operations- Line 1.

Subsection E.: This section addresses the following emissions unit

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

Commence Construction: 3/26/1997. Initial Startup Date: 10/1999.

*{Permitting note(s): This emissions unit is regulated under 40 CFR 63, applicable portions of Subparts A (General Provisions) and LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), NSPS- 40 CFR 60 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 (Standards of Performance for Portland Cement Plants) adopted and incorporated by reference in Chapter 62-204.800, F.A.C.}*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**E.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) attached to and is part of this permit.

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**E.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to and is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

**E.3. Design Capacity.** The maximum process rate for this emissions unit has a design capacity of 150 tons per hour of cement output.

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

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

**E.4. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

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

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection E. EU005 Finish Grinding Operations- Line 1.

#### EMISSION LIMITATIONS AND STANDARDS

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

**E.5. Particulate Matter (each EP).** Particulate Matter emissions from the Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot.

[Rule 62-212.400(BACT), F.A.C.; and Permit No. AC01-267311/PSD-FL-228]

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

**E.6. Visible Emissions (each EP).**

a. Visible emissions shall not exceed 5 percent opacity.

[Rule 62-204.800(11)(b)48 and 62-212.400(BACT), F.A.C.; Permit No. AC01-267311/PSD-FL-228].

b. Visible emissions shall not exceed 10 percent opacity  
[40 CFR 63.1345]

*{Permitting Note: LLL opacity limit per 40 CFR 63.1345 of 10 percent is demonstrated in compliance by compliance to the above BACT limit. The averaging time for **Condition E.6.** is based on the run time of the specified test method.}*

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.7. Visible Emissions Test (Each EP).**

BACT Annual VE Testing Requirements. The test method for demonstrating compliance with the 5% opacity limit shall be EPA Method 9 (30 minutes, 6-minute averages) in accordance with 40 CFR 60 Appendix A. The Permittee shall conduct a visible emissions test at each emissions point on an annual basis, calendar year (January 1 to December 31).

[Rule 62-297.310(5)(b) and Rule 62-297.310(8)(a); Permit No. AC01-267311/PSD-FL-228]

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

**E.8. Particulate Matter.** Compliance with the visible emissions standard specified in **Condition E.6.** shall be considered compliance with the particulate matter standard established in **Condition E.5.** Should the Department believe the particulate emission standards are not being met, the Department may require that compliance with the particulate emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.

[Rules 62-212.400(BACT) and 62-297.620(4), F.A.C., and Permit No. AC01-267311/PSD-FL-228]

**E.9. (LLL) Periodic Visible Emissions - EPA Method 22 (EP's 02, 05, 06 & 07).**

a. Sources subject to a limitation on opacity under 40 CFR 63.1345 (**Specific Condition E.6.b.**) must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) **Specific Condition No. E.9.**, and in accordance with the operation and maintenance plan (40 CFR 63.1347) **Specific Condition No. E.12.** The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. E.11.**, and an

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection E. EU005 Finish Grinding Operations- Line 1.

approved alternate monitoring requirements (40 CFR 63.1350(o)(5)) **Specific Condition No. E.11**, if applicable.

1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A–7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under **(1) of this Specific Condition**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347 (**Specific Condition No. E.12.**).

[Rule 62-204.800(11)(b)48, F.A.C.; and 63.1350(f)(1), (f)(3)]

#### **E.10. (LLL) Daily Visible Emission - EPA Method 22 Test (EP03 & EP04).**

The owner or operator of a finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCD of these affected sources in accordance with the procedures of Method 22 of appendix A to 40 CFR part 60. 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 minute.

1. For a finish mill, the facility must monitor opacity by conducting daily visible emissions observations of the mill sweep and air separator PM control devices (PMCD) of these affected sources in

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection E. EU005 Finish Grinding Operations- Line 1.

accordance with the procedures of Method 22 of Appendix A-7. The duration of the Method 22 performance test must be 6 minutes.

2. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.
3. If visible emissions are observed during the follow-up Method 22 performance test required by paragraph (ii) of this section from any stack from which visible emissions were observed during the previous Method 22 performance test required by paragraph (i) of the section, the facility must then conduct an opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of Appendix A-4. The duration of the Method 9 test must be 30 minutes.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(f)(2)]

**E.11. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under paragraph (o) of this section and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

**E.12. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The facility operations and maintenance plan must address periods of startup and shutdown.
- b. Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above in E.9.b.*).

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347(a)(1) and (2)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection F. EU006 Cement Handling, Loading, and Bagging Operations

**Subsection F.:** This section addresses the following emissions unit

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

Commence Construction: 3/26/1997. Initial Startup Date: 10/1999.

*{Permitting note(s): This emissions unit is regulated under 40 CFR 63, applicable portions of Subparts A (General Provisions) and LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) adopted and incorporated by reference in Rule 62-204.800(8)(b)49, F.A.C.; NSPS- 40 CFR 60 Subpart A (General Provisions), and NSPS- 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) adopted and incorporated by reference in Rule 62-204.800(8)(b)9, F.A.C. This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F – Standards of Performance for Portland Cement Plants)}.*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**F.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) attached to and is part of this permit.

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**F.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to and is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

**F.3. Design Capacity.** The maximum process rate for this emissions unit has a design capacity of 500 tons per hour of cement Silo unloading.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C; and Permit No. AC01-267311/PSD-FL-228]

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

**F.4. Hours of Operation.** This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

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

#### EMISSION LIMITATIONS AND STANDARDS

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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection F. EU006 Cement Handling, Loading, and Bagging Operations

**F.5. Particulate Matter (each EP).** Particulate Matter emissions from the Fabric Filters shall not exceed 0.01 grains per dry standard cubic foot.

[Rule 62-212.400(BACT), F.A.C.; and Permit No. AC01-267311/PSD-FL-228]

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

**F.6. Visible Emissions (each EP).**

a. Visible emissions shall not exceed 5 percent opacity.

[Rules 62-204.800(11)(b)48 and 62-212.400(BACT), F.A.C.; Permit No. AC01-267311/PSD-FL-228]

b. Visible emissions shall not exceed 10% opacity.

[40 CFR 60.62 and 63.1345]

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

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.7. Annual Compliance Tests Required.** The permittee shall conduct a visible emissions test at each emissions point on an annual basis, no less frequently than once every calendar year (January 1 – December 31).

[Rule 62-297.310(8)(a)1, F.A.C.]

**F.8. Visible Emissions – Test Method (Each EP).**

BACT Annual VE Testing Requirements. The test method for demonstrating compliance with the 5% opacity limit shall be EPA Method 9 for the purpose of annual compliance testing (30-minutes, 6-minute averages) in accordance with 40 CFR 60 Appendix A-4. The permittee shall conduct a visible emissions test at each emissions point on an annual basis, no less frequently than once every calendar year (January 1 – December 31).

[Rules 62-297.310(8)(a)1 F.A.C.; Permit No. AC01-267311/PSD-FL-228]

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

[Rules 62-297.310(4)(a)2 and (7)(a)4, F.A.C.; Permit No. AC01-267311/PSD-FL-228]

**F.9. (LLL) Periodic Visible Emissions – Method 22 (each EP).**

a. Sources subject to a limitation on opacity under 40 CFR 63.1345 must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347). The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)), if applicable.

1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7. The performance test must be conducted while the affected source is in operation.
2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection F. EU006 Cement Handling, Loading, and Bagging Operations

that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under **Condition F.9.a**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800, F.A.C. 40 CFR 63.1350(f)(1), (f)(3)]

**F.10. Particulate Matter.** Compliance with the visible emissions standard specified in **Condition F.6** shall be considered compliance with the particulate matter standard established in **Condition F.5**. Should the Department believe the particulate emission standards is not being met, the Department may require that compliance with the particulate emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.

[Rules 62-212.400(BACT) and 62-297.620(4), F.A.C.; and Permit No. AC01-267311/PSD-FL-228.]

**F.11. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under paragraph (o) of 40 CFR 63, Subpart LLL and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

**F.12. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
- b. Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above in F.9.b.*)

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

### **SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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#### **Subsection F. EU006 Cement Handling, Loading, and Bagging Operations**

[40 CFR 63.1347(a)(1) and (2)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection G. EU007 Coal Handling and Grinding Operations - Line 1

**Subsection G.:** This section addresses the following emissions unit

| EU No. | Brief Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -007   | <p><b>Coal Handling and Grinding Operations - Line 1.</b> Emission Points are controlled by Fabric Filters and are identified as follows:</p> <p>EP01: Coal &amp; Petroleum Coke Mill vented from CM baghouse S17 into stack S18.</p> <p>EP02: Pulverized coal, petroleum coke, and fly ash storage bin's baghouse S-21 to atmospheric vent and fugitive emissions from the coal handling and storage operations.</p> <p>EP03: S07-Coal Storage &amp; Handling Building (fugitive)</p> <p>EP04: Mobile Powerscreen (A26) from powerscreen A26 onto powerscreen-conveyor A27.</p> <p>EP05: Mobile Powerscreen Conveyor (A27) from powerscreen-conveyor A26 onto ground pile.</p> <p><i>The Mobile Powerscreen &amp; Mobile Powerscreen Conveyor will operate at EU007-Coal Handling and Grinding Operation and will also service EU 001- Raw Material Handling and Storage. The Powerscreen will be a track-mounted, mobile scalping screen with a short discharge conveyor. This EP will sort oversized coal or raw material that would otherwise jam the feed hoppers or exceed grinding-mill capacity.</i></p> |

Commence Construction: 3/26/1997. Initial Startup Date: 12/08/1999.

*{Permitting note(s): This emissions unit is regulated under applicable portions of NSPS- 40 CFR 60 Subpart A (General Provisions), and Subpart Y (Standards of Performance for Coal Preparation Plants) adopted and incorporated by reference in Rule 62-204.800(8)(b)33, F.A.C.}*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**G.1. NSPS Requirements – Subpart Y.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants) attached to and is part of this permit.

[Rule 62-204.800(8)(b)33, F.A.C.; and NSPS Subpart Y of 40 CFR 60]

**G.2. Design Capacity.** Emission Unit 007 capacity shall not be affected by the occasional use of the (EP04) Mobile Powerscreen & (EP05) Mobile Powerscreen Conveyors.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C; and Permit Nos. AC01-267311/PSD-FL-228 and 0010087-019-AC]

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

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

*{Permitting Note: Emission Unit 007 operating schedule (8,760 hours/year) shall not be affected by the occasional use of the (EP04) Mobile Powerscreen & (EP05) Conveyors.}*

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

#### EMISSION LIMITATIONS AND STANDARDS

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

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection G. EU007 Coal Handling and Grinding Operations - Line 1

##### **G.4. Visible Emissions.**

- a. EP01 and EP02. Visible emissions shall not exceed 5 percent opacity for each identified emission point.
- b. EP04 and EP05. Visible emissions shall not exceed 10% opacity for each identified emission point.  
*{Permitting Note: The more restrictive (10% Opacity) requirements of 40 CFR 60.672(b) shall apply to EP04 and EP05 while operating at EU 007, which has a 20% Opacity VE limit.}*
- c. EP03 - Fugitive Emissions. An opacity of less than 5% shall be maintained at each storage pile, handling equipment, etc., except during times when coal is being added, moved or removed from the coal pile when the opacity shall be no more than 20%.
- d. EP03. Coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal shall not exceed a 20% opacity.

[Rules 62-204.800(8)(b)33 and 62-212.400(BACT), F.A.C.; and Permit Nos. AC01-267311/PSD-FL-228 and 0010087-019-AC; and 40 CFR 60.254(a).]

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

##### **G.5. Particulate Matter.** Particulate Matter emissions from coal, petroleum coke, and fly ash handling facilities shall be minimized by following the procedures stated in Section II. Facility-wide Conditions, **Condition FW5.** and these listed below:

- a. All conveyors and transfer points shall be enclosed to preclude particulate emissions (except those directly associated with coal petroleum coke, and fly ash stacking/reclaiming).
- b. Coal, petroleum coke, and fly ash storage piles shall be shaped, compacted and oriented to minimize wind erosion.
- c. Water sprays or chemical wetting agents and stabilizers shall be applied to storage piles, handling equipment, etc., during dry periods and as necessary to all facilities to maintain an opacity of that stated in **Specific Condition G.4.c.**

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

##### **G.6. Particulate Matter (each EP).** Particulate Matter emissions from the Fabric Filters shall not exceed 0.01 gr/dscf.

[Rule 62-212.400(BACT), F.A.C.; and Permit No. AC01-267311/PSD-FL-228]

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.7. Annual Compliance Test Required.** No less frequently than once every calendar year (January 1 – December 31) each emission point shall be tested to demonstrate compliance with opacity.

- a. Opacity. Visible emission tests for EP04 & EP05 must be tested annual at EU001 or EU007.
- b. Particulate Matter. Compliance with the visible emissions standard specified in **Condition G.4.a.**, shall be considered compliance with the particulate matter standard established in **Condition G.5.** Should the Department believe the particulate emission standards is not being met, the Department may require that compliance with the particulate emission standard be demonstrated by testing in accordance with Rule 62-297, F.A.C.

[Rules 62-212.400(BACT) and 62-297.310(8)(a)1, F.A.C.; Permit Nos. AC01-267311/PSD-FL-228; and 0010087-019-AC]

##### **G.8. Visible Emissions Compliance Requirements (EP01, EP02, EP 04 EP05 and Fugitive Emissions).**

The test method for visible emissions shall be EPA Method 9 (1-hour, 6-minute averages) in accordance with 40 CFR 60 Appendix A. The Permittee shall conduct a visible emissions test at each emissions point on an annual basis, (January 1 to December 31).

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection G. EU007 Coal Handling and Grinding Operations - Line 1

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- a. If, during the initial 30 minutes of the observation of a Method 9 of appendix A-4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.
- b. For fugitive emission, the following additional requirements shall be met:
  1. The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
  2. The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
  3. The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.

[Rule 62-204.800(8)(b)33, F.A.C.; Rule 62-297.310(8)(a); Permit Nos. AC01-267311/PSD-FL-228 and 0010087-019-AC; 40 CFR 60.257(a)(1)]

#### MONITORING

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

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

**G.10. Recordkeeping (EP04 & EP05).** The owner or operator shall maintain records to document the monthly and the twelve-month rolling totals of tons of rock crushed, conveyed and the hours of operation for each emissions point. These records shall be retained for five years.

[Permit No. 0010087-019-AC.]

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection H. EU008 Clinker-to-Railcar/ Truck Transfer Conveyor**

**Subsection H.:** This section addresses the following emissions unit

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

Commence Construction: ~2009. Initial Startup Date: ~2009.

*{Permitting note(s): This emissions unit is regulated under applicable portions of 40 CFR 63, Subparts A (General Provisions) and LLL (Portland Cement Manufacturing Industry) adopted by reference in Rule 62-201.800(11)(b)48, F.A.C.; and PSD (BACT dated December 12, 1996).}*

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

**ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS**

**H.1. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to and is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

**H.2. Hours of Operation (Railcar and Truck):** The total hours of transfer operation are limited to 600 hours/year and shall be recorded.

[Rules 62-4.160(2), 62-210.200(PTE), F.A.C., and Permit No. 0010087-014-AC]

**H.3. Permitted Capacity:** The maximum operating rates are listed below and shall not be exceeded without prior Department approval.

| MATERIAL       | EMISSION UNIT/ POINT | RATE                    |
|----------------|----------------------|-------------------------|
| Cement Clinker | EU008                | 400 TPH and 120,000 TPY |

*{Permitting Note. The 400 tons/hour is the conveyor's design rate. The ton/year limit is the clinker transfer limit.}*

[Permit No. 0010087-014-AC]

**H.4. Permitted Maximum Allowable Emission Rate:** The permitted maximum allowable emission rate for each pollutant is as follows:

| POLLUTANT | LOCATION             | EMISSION RATE | RULE           |
|-----------|----------------------|---------------|----------------|
| VE        | EU008<br>EPs 01 - 03 | 5% Opacity    | BACT           |
|           |                      | 10% Opacity   | 40 CFR 63.1345 |

*{Permitting Note: The 10% Opacity from 40 CFR 63.1345 is sufficed by compliance to the BACT dated December 12, 1996.}*

[Rules 62-201.800(11)(b)48, and 62-212.400(BACT), F.A.C.; and Permit No. 0010087-014-AC]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection H. EU008 Clinker-to-Railcar/ Truck Transfer Conveyor

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.5. Visible Emissions Test (EP01, EP02 & EP03).**

**BACT Annual VE Testing Requirement.** The test method for demonstrating compliance with the 5% opacity limit shall be EPA Method 9 (30-minutes, 6-minute averages) in accordance with 40 CFR 60 Appendix A. The Permittee shall conduct a visible emissions test at each emissions points EP01 – EP03 on an annual basis, no less frequently than once every calendar year (January 1 – December 31).

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

[Rules 62-297.310(5)(b) and (8)(a)1; Permit No. 0010087-014-AC].

##### **H.6. LLL Periodic Visible Emissions - EPA Method 22 Monthly (each EP).**

a. Sources subject to a limitation on opacity under 40 CFR 63.1345 (**Specific Condition No. H.4.**) must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) (**Specific Condition No. H.6.**) and in accordance with the operation and maintenance plan (40 CFR 63.1347) (**Specific Condition No. H.10.**). The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. H.7.** and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)) **Specific Condition No. H.7.**, if applicable.

1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A–7. The performance test must be conducted while the affected source is in operation.
2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of Appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1-hour of any observation of visible emissions.
5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.

##### **H.6. Continued:**

6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection H. EU008 Clinker-to-Railcar/ Truck Transfer Conveyor

requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).

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

- b. *Corrective actions.* If visible emissions are observed during any Method 22 visible emissions test conducted under **Condition H.6(1)**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800, F.A.C.; and 40 CFR 63.1350(f)(1), (f)(3)]

- H.7. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under paragraph (o) of this section and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

### REPORTING AND RECORDKEEPING REQUIREMENTS

- H.8. Recordkeeping.** The owner or operator shall maintain records to document the monthly and the twelve-month rolling totals of tons of clinker transferred and the hours of operation. These records shall be retained for five years.

[Permit No. 0010087-014-AC]

- H.9. Test Reports.** In each test report, submit the maximum input/production rate at which this source was operated since the most recent test.

[Permit No. 0010087-014-AC]

- H.10. (LLL) Operation & Maintenance Plan.** The owner or operator shall comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1347.

[Permit No. 0010087-014-AC; and 40 CFR 63.1347]

- H.11. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.

- b. Corrective actions to be taken when required by 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above H.6.b.*)

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection I EU009 Raw Mill System - Line 2 - Ancillary Equipment

**Subsection I.** This section addresses the following emissions unit(s).

| EU No. | Brief Description                                                                                                   |
|--------|---------------------------------------------------------------------------------------------------------------------|
| -009   | Raw Mill System Line 2 - Ancillary Equipment. This emissions unit consists of operations that do not vent to EU010. |

Emissions unit 009 has the following visible emissions points:

| EMISSION POINT     | DESCRIPTION                                                             |
|--------------------|-------------------------------------------------------------------------|
| EP01Baghouse D33   | Transfer D32-34 belts (Additive Reclaim System)                         |
| EP02Baghouse D55   | Transfer D34-36 belts (Flyash Transport)                                |
| EP03Baghouse D37   | Transfer D36-39 belts and bins (Millscale & Feldspar Transport –Line1)  |
| EP04Baghouse D49   | D Bins unloading to belts (Raw Mill Feed Transport –Line1)              |
| EP05 Baghouse 2D37 | Transfer D36-2D39 belts & bins (Millscale & Feldspar Transport- Line 2) |
| EP06Baghouse 2D49  | 2D Bins for unloading to belts (Raw Mill Feed Transport – Line 2)       |
| EP07Baghouse 2E28  | Airslides and bottom to airlift (Raw Meal Transport – Line 2)           |
| EP08 Baghouse C21  | Transfer C13-14 belts and D52 belt (Flyash unloading)                   |
| EP09 Baghouse 2G07 | Top of Airlift and homogenizing silo (Blend Silo- Line 2)               |
| EP10 Baghouse 2H08 | Homogenizing silo to preheater feed and bin 2E30 (Kiln-Feed System)     |

Commence Construction: 7/2005. Initial Startup Date: 06/12/2008.

*{This emission unit is regulated under 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants adopted by reference into Rule 62.204.800(8)(b)9, F.A.C. and applicable portions of 40 CFR 60 Subpart A (General Provisions);-40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry), adopted by reference into Rule 62.204.800(11)(b)48, F.A.C. and 40 CFR 63 Subpart A (General Provisions); and PSD.}*

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

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**I.1. NSPS Requirements – Subpart F.** These emission points shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) attached to and is part of this permit.

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS 40 CFR 60, Subpart F]

**I.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL.

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

**I.3. Hours of Operation.** This emission unit may operate continuously, i.e., 8760 hours per year.

[Rule 62-210.200(PTE), F.A.C.]

#### EMISSION LIMITATIONS AND STANDARDS

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

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection I EU009 Raw Mill System - Line 2 - Ancillary Equipment

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#### I.4. Particulate Matter Emissions.

- a. PM. Particulate matter emissions from each emission point of emissions unit 009 shall not exceed 0.01 grains/dscf (3.93 lb/hour and 17.2 tons/year).
- b. PM<sub>10</sub>. PM<sub>10</sub> emissions shall not exceed 0.007 grains/dscf (2.75 lb/hour and 12.09 tons/year).
- c. Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

[Rule 62-212.400(BACT), F.A.C.; and Permit No. 0010087-031-AC]

#### I.5. Visible Emissions.

- a. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity (No visible emissions).

[Rules 62-297.310(8)(a), F.A.C, 62-212.400 (BACT); and Permit No. 0010087-031-AC]

- b. Visible emissions from each emission point of this emissions unit shall not exceed 10% opacity.

*{Permitting Note: Compliance with this emission limit on an annual basis will be demonstrated by complying with the 5% opacity limit.}*

[40 CFR 63.1345]

### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.6. Visible Emissions (Each EP).

BACT Annual VE Testing Requirement. The test method for demonstrating compliance with the 5% 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, no less frequently than once every calendar year (January 1 – December 31).

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228}*

[Rules 62-297.310(5)(b) and (8)(a)1.; and Permit No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H))]

- #### I.7. Annual Compliance Testing for PM and PM<sub>10</sub> Emissions.
- Annual compliance testing for PM and PM<sub>10</sub> emissions from these emission points is waived, and an alternative standard of 5% opacity (no visible emissions) is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

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

#### I.8. (LLL) Periodic Visible Emissions – EPA Method 22 (each EP).

- a. Sources subject to a limitation on opacity under 40 CFR 63.1345 (**Specific Condition No. I.5.**) must conduct required emissions monitoring in accordance with the following (i) through (vii) (40 CFR 63.1350(f)(1)(i) through (f)(1)(vii)) (**this Specific Condition**) and in accordance with the operation and maintenance plan (40 CFR 63.1347) **Specific Condition No. I.11**. The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. I.9.**, and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)) **Specific Condition No. I.9.**, if applicable.
  1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-

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#### Subsection I EU009 Raw Mill System - Line 2 - Ancillary Equipment

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annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1 hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to (vii).
  7. If visible emissions from a building are monitored, the requirements of (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. (Not Applicable) (*The mill sweep and air separator vent to EU 010*)
- c. Corrective actions. If visible emissions are observed during any Method 22 visible emissions test conducted under Condition **I.8.a**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800(11)(b)48, F.A.C.; and 63.1350(f)(1), (f)(3)]

*{Permitting Note: For LLL compliance by Method 9 testing of the opacity limit is 10%. If this testing is used to suffice for annual testing required by **Condition I.5a.**, the opacity limit is 5 percent.}*

**I.9. Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under paragraph (o) of this section and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

**I.10. O&M Plan for Baghouses.** The owner or operator shall comply with the operation and maintenance plan (O&M plan) for these emission points. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be on file with the Department’s Northeast District office.

[Permit No. 0010087-031-AC, and 40 CFR 63.1347]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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- I.11. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:
- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
  - b. Corrective actions to be taken when required by 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement above H.6.c.*)
- Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.  
[40 CFR 63.1347]

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#### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

**Subsection J.** This section addresses the following emissions unit(s).

| EU No. | Brief Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -010   | <b>In-line Kiln/Raw Mill System - Line 2.</b> The stack of the in-line kiln/raw mill system- line 2 is designated by the applicant as Emission point 2E21.<br>Pollutant controls include: fabric filter, selective non-catalytic reduction (SNCR), sorbent injection, staged combustion, tire injection, and dust shuttling system (DSS). Where the fabric filter controls PM, SNCR controls NOx, sorbent injection controls acid gases and metals, staged combustion and tire injection controls NOx, and DSS controls mercury emissions. |

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 (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 from the Portland Cement Manufacturing Industry. 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. This EU is also regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.*

*The in-line raw mill includes a raw mill heater system that vents to EU010. Allowances of the heater system (e.g., fuels, etc.) are defined in this Subsection.}*

At the time of issuance of this Permit, this EU is subject to DDDD.

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

**J.1. NESHAP Applicability.**

- NESHAP Subpart A. If this emissions unit becomes subject to NESHAP Subpart LLL (See **Specific Conditions J.1.b. and J.3.**) it shall comply with all the applicable standards contained in 40 CFR 63 Subpart A – National Emission Standards for Hazardous Air Pollutants - General Provision. NESHAP Subpart A is included in the appendices document. [NESHAP Subpart A]
- NESHAP Subpart LLL. Currently, the permittee uses or intends to use secondary materials that are identified as solid waste (40 CFR 241) as a fuel in the kiln system, therefore requirements of Rule 62-204.800(9)(f), F.A.C., (DDDD) apply rather than LLL. If the operator ceases to use materials identified as a solid waste for fuel in the kiln, then the operator may comply instead with the applicable requirements of NESHAP Subpart LLL as provided in Appendix NESHAP Subpart LLL. If the operator resumes use of materials identified as a solid waste for fuel in the kiln, however, the requirements of Rule 62-204.800(9)(f), F.A.C., will apply immediately (in lieu of NESHAP Subpart LLL)}. [40 CFR 63.1348(a)]

**J.2. NSPS Applicability.**

- NSPS Subpart A. Whether subject to LLL or DDDD this emissions unit shall comply with all the applicable standards contained in 40 CFR 60 Subpart A – New Source Performance Standards – General Provision. NSPS Subpart A is included in the appendices document. [40 CFR 60, Subpart A]
- NSPS Subpart DDDD. The emission point, Baghouse I.D: 331.BF200, “main stack & dust collector for preheater/kiln/cooler/raw mill” shall comply with all the applicable standards of Rule 62-204.800(8)(f),

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

F.A.C., which implements the emission guidelines of 40 CFR 60 Subpart DDDD - Emission Guidelines and Compliance Times for Commercial and Industrial Solid Waste Incineration Units (CISWI) that Commenced Construction On or Before November 30, 1999. The compliance date for this subpart is the sooner of either (1) one year after “effective date” of EPA approval 111(d) plan or (2) February 7, 2018. NSPS Subpart DDDD is included in the appendices document. [FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines 40 CFR 60 Subpart DDDD emission guidelines]

#### J.3. Change of NSPS/NESHAP Applicability Status.

- a. Waste-to-Fuel Switch. If the permittee combusts solid waste in the kiln, the kiln is subject to Subpart DDDD. If the permittee ceases to combust solid waste in the kiln, the permittee has the option of switching from compliance with Subpart DDDD to compliance with Subpart LLL. A permittee making this election must meet the following conditions:
  - (1) The permittee must first establish an “**effective date**” for the waste-to-fuel switch, which must be at least six (6) months after the date that the permittee ceased (or intends to cease) combusting solid waste in the kiln, consistent with 40 CFR 60.2710(a)(2), referenced under Rule 62-204.800(9)(f), F.A.C.
  - (2) The kiln must remain in compliance with DDDD, set forth in **Conditions J.37.** through **J.51.**, below, until the “effective date” of the waste-to-fuel switch.
  - (3) The permittee must provide the Department with 30 days’ advance notice prior to the “effective date” of the waste-to-fuel switch.
  - (4) The operator must be in compliance with NESHAP Subpart LLL on the “effective date” of the waste-to-fuel switch.
- b. Notification of Waste to Fuel Switch. The permittee’s 30-day advance notification to the Department regarding the “effective date” of a waste to fuel switch referenced in **(3)** above must identify:
  - (1) The date of the notice;
  - (2) The name of the owner or operator and the location of the Subpart DDDD kiln that will cease burning solid waste;
  - (3) The kiln is currently a DDDD unit, and Subpart LLL will become applicable as of the “effective date” of the waste-to-fuel switch;
  - (4) The fuel(s), non-waste material(s), and solid waste(s) the kiln is currently combusting and has combusted over the past 6 months, and the fuel(s) or non-waste materials the kiln will commence combusting;
  - (5) The date on which the kiln became subject to the currently applicable Subpart DDDD emission limits;
  - (6) The date the permittee ceased combusting solid waste in the kiln; and
  - (7) The “effective date” of the waste-to-fuel switch, consistent with **Specific Conditions J.3.a** above.
- c. If the permittee meets these conditions, the kiln will become subject to the applicable requirements of NESHAP Subpart LLL on the “effective date” of the waste-to-fuel switch. **Conditions J.24.** through **J.36.** below, reflecting the Subpart LLL requirements, will apply to the kiln instead of the Subpart DDDD requirements reflected in **Conditions J.37.** through **J.51.**
- d. Re-Firing Solid Waste. Compliance Requirements. Following a waste-to-fuel switch and the applicability of LLL, if the permittee begins using materials identified as a solid waste in the kiln, the kiln will again be subject to the Subpart DDDD requirements of Rule 62-204.800(9)(f), F.A.C. The “effective date” of the fuel-to-waste switch is the first day that the permittee introduces (or re-introduces) solid waste into the kiln. The permittee must complete all initial compliance demonstrations for any LLL standards that are applicable to the kiln before the permittee commences or recommences combustion of solid waste. In addition, the permittee must provide 30 days’ prior notice of the fuel-to-waste switch “effective date.” After the completion of any required testing and the thirty-day notice, Subpart LLL requirements will no longer apply.

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

- e. All air pollution control equipment necessary for compliance with any newly applicable emissions limits which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the “effective date” of the waste-to-fuel or fuel-to-waste switch.
- f. All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of combusting solid waste must be installed and operational as of the “effective date” of the waste-to-fuel, or fuel-to-waste switch. All calibration and drift checks must be performed as of the effective date of the waste-to-fuel, or fuel-to-waste switch. Relative accuracy testing for DDDD CEMS need not be repeated if that testing was previously performed consistent with section 112 monitoring requirements or monitoring requirements.

[Rule 62-204.800(9)(f), F.A.C., referencing 40 CFR 60.2710(a)]

- J.4. Process Rate Limitations.** The kiln shall not process more than 212 tons of dry preheater feed and dry flyash per hour (24-hour average) and shall not produce more than 125 tons of clinker per hour (24-hour average). The facility shall not produce more than 156 tons of Portland cement, masonry cement, and other specialty products per hour (30-day average). Process and production rates shall be further limited to 1,857,120 tons of dry preheater feed and dry flyash in any consecutive 12-month period, 1,095,000 tons of clinker in any consecutive 12-month period, and 1,366,560 tons of Portland cement in any consecutive 12-month period.

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

$$\text{Clinker Production} = [(\text{Feed})(\text{Kiln Feed LOI Factor}) + (\text{Fly Ash Injection})(\text{Fly Ash LOI Factor})]$$

Where:

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

[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0010087-031-AC]

- J.5. Dry Sorbent Injection (DSI) System.** The owner or operator is authorized to operate one DSI system and ancillary equipment which will vent to the kiln exhaust; the system is considered part of the equipment. [Permit No. 0010087-065-AC]

- J.6. Traditional Fuels.** The permittee is authorized to fire the following traditional fuels in the kiln: Coal, petroleum coke, natural gas, oil, propane, fly ash, and whole tires. The burning of RCRA hazardous waste or used oil is prohibited. *{Permitting Note: This condition clarifies that the pyro-processing kilns are not limited to firing only “bituminous” coal and is capable of firing other coals.}* [Permit Nos. 0010087-015-AC; and 0010087-031-AC; and 0010087-051-AC]

- J.6. Fuels and Materials Not Allowed** The owner or operator shall not introduce hazardous wastes, petroleum contaminated soil or materials, solid fuels other than those allowed by this permit, or solid wastes other than whole tires into any part of the process or emission control equipment. [Permit No. 0010087-031-AC]

- J.7. Oil.** The permittee is authorized to fire the following fuel oils in the kiln:
- a. The kiln is authorized to fire distillate oil, on-specification and off-specification used oil with a sulfur content of 0.5%.
  - b. The kiln is authorized to fire off-specification used oil up to a total halogen content of 4,000 ppm under the rebuttable presumption that the off-specification used oil does not contain hazardous waste.
  - c. The kiln is authorized to fire propane and distillate oil with no limitations on the amount of each fuel fired and when these fuels are being fired in the kiln.

[Permit No. 0010087-059-AC; and Rule 62-210.200(PTE), F.A.C.]

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2**

**J.8. On-Specification Used Oil.** On-specification used oil shall not exceed the following allowable levels and specifications:

| Constituent/Property | Allowable Level   |
|----------------------|-------------------|
| Arsenic              | 5 ppm maximum     |
| Cadmium              | 2 ppm maximum     |
| Chromium             | 10 ppm maximum    |
| Lead                 | 100 ppm maximum   |
| Flash Point          | 100°F Minimum     |
| Total Halogens       | 4,000 ppm maximum |

**Notes:**

- (1) Applicable standards for the burning of used oil containing polychlorinated biphenyls (PCB) are imposed by 40 CFR 761.20(e).
- (2) The allowable levels do not apply to mixtures of used oil and hazardous waste that continue to be regulated as hazardous waste (see 40 CFR 279.10(b)).
- (3) Used oil containing more than 1,000 parts per million (ppm) total halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such used oil is subject to 40 CFR 266 Subpart H when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

- a. Records: The quantity of used oil accepted and the date of acceptance.
- b. Retention of Records: All records shall be maintained for at least 3 years.

[Chapter 62-710, F.A.C. and 40 CFR 279 Subpart B; Permit No. 0010087-059-AC]

**J.9. Off-Specification Used Oil.** The off-specification used oil shall meet the requirements of 40 CFR 279 Subpart G including the following.

- a. Total Halogen Content: The total halogen content shall be below 1,000 ppm. The permittee may purchase off-specification used oil with total halogen concentration up to 4,000 ppm under the rebuttable presumption that the off-specification used oil does not contain hazardous waste.
- b. Records: The quantity of used oil accepted and the date of acceptance.
- c. Retention of Records: All records shall be maintained for at least 3 years.

[Chapter-62-710.200(2), F.A.C.; 40 CFR 279 Subpart G; and, Permit No. 0010087-059-AC]

**J.10. Rebuttable Presumption of Off-Specification Used Oil.**

- a. Hazardous Waste Determination: To ensure that used oil is not hazardous waste under the rebuttable presumption, the permittee shall determine if the used oil contains above or below 1,000 ppm total halogens by:
  - (1) Testing the used oil; or
  - (2) Receiving the used oil from a processor/re-refiner subject to regulation under 40 CFR 279, Subpart F. The processor/re-refiner shall provide fuel specifications certifying the used oil meets the allowable levels and fuel specifications.
- b. Total Halogens > 1,000 ppm: If the used oil contains greater than or equal to (>) 1,000 ppm total halogens, it is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste

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#### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

listed in 40 CFR 261, Subpart D. The permittee may rebut the presumption by demonstrating that the used oil does not contain hazardous waste by testing the used oil demonstrating that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in 40 CFR 261, Appendix VIII.

- (1) The rebuttable presumption does not apply to metalworking oils/fluids containing chlorinated paraffin's, if they are processed, through a tolling arrangement as described in 40 CFR 279.24(c), to reclaim metalworking oils/fluids. The presumption does apply to metalworking oils/fluids if such oils/fluids are recycled in any other manner, or disposed.
  - (2) The rebuttable presumption does not apply to used oils contaminated with chlorofluorocarbons (CFC) removed from refrigeration units where the CFC are destined for reclamation. The rebuttable presumption does apply to used oils contaminated with CFC that have been mixed with used oil from sources other than refrigeration units.
- c. **Prohibited:** The permittee shall not process, blend or mix any used oil on site to meet fuel specifications. [Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart and G; and, Permit No. 0010087-059-AC]

**J.11. Whole Tire.** Whole tire usage shall be in compliance with the following limits and conditions: Whole tires may be used as a fuel. Such tires shall be fed into the kiln system at the transition section between the base of the precalciner and the point where gases exit the kiln. The tire feeder mechanism shall consist of a rotary feeder, which seals the tire entry point from the atmosphere. The permitted heat input shall not exceed 120 MMBtu/hr at any time. Before initiating tire firing, the gases exiting the kiln ahead of the calciner burner shall be maintained at a minimum of 1,440 degrees F for at least one hour. [Rules 62-210.200(PTE), 62-210.200(203), and 62-213.410, F.A.C.; and, Permit Nos. AC01-267311/PSD-FL- 228; 0010087-003-AC/PSD-FL-228A, 0010087-015-AC, and 0010087-55-AC/(PSD-FL-228I & 350G)]

#### RAW MILL HEATER

**J.12. Raw Mill Heater Fuels.** The permittee is authorized to fire natural gas. Natural gas firing shall not exceed 40 MMBtu/hr in the Raw Mill Air Heater. The permittee is authorized to fire unused distillate oil with a maximum sulfur content of 0.5% in the raw mill air heater with no limitations on the amount of distillate oil fired in the air heater. The raw mill air heater is permitted to fire on-specification used oil with a maximum sulfur content of 0.5% and shall not exceed 1,573,000 gallons/year.

*{Permitting Note: The on-specification used oil limit is based on 286 gallons/hour and 5,500 hours/year.}*

[Rule 62-213.410, F.A.C.; Permit Nos. AC01-267311/PSD-FL-228 and 0010087-015-AC, Permit No. 0010087-059-AC]

**J.13. Standards for the Management of Used Oil Requirements (Raw Mill Air Heater).** The permittee shall comply with the applicable requirements of 40 CFR 279, Subpart A (Definitions) and Subpart B (Applicability) adopted by reference in Rule 62-710.200(2), F.A.C. [Rule 62-710.200(2), F.A.C.; 40 CFR 279 Subparts A and B; and, Permit No. 0010087-059-AC]

**J.14. Whole Tire Management and Tire Feeding.** Whole tires fired-shall be fed into the kiln system at the transition section between the base of the precalciner and the point where gases exit the kiln. The tire feeder mechanism shall be designed with a double airlock. Tires and tire derived fuel shall be stored, handled and managed in accordance with the provisions of Rule 62-711, F.A.C. [Rules 62-210.200(PTE), F.A.C., F.A.C.; Permit No. 0010087-031-AC; and Permit No. 0010087-059-AC]

**J.15. O&M Plan for Baghouses.** The owner or operator shall adhere to the prepare, update and maintain an operation and maintenance plan (O&M plan). The O&M plan address the schedule for inspection of this equipment and required preventive maintenance and required records of the condition of the equipment upon each inspection and any maintenance activities performed. [Permit No. 0010087-031-AC, Permit No. 0010087-053-AC /PSD-FL 228F and PSD-FL-350D]

**J.16. Combustion and Process Control Technology.** The owner or operator shall comply with the installed selective non-catalytic reduction (SNCR) and multistage combustion (MSC). The owner or operator shall use

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

SNCR and/or MSC for control of NO<sub>x</sub> emissions. The owner or operator shall control emissions of CO and VOC through control of the combustion process. The owner or operator shall control emissions of SO<sub>2</sub> through design and control of the clinker production process. [Rule 62-212.400(BACT), F.A.C.; Permit No. 0010087-031-AC]

*{Permitting Note: The emission limits for particulate matter and visible emissions imposed by Rule 62-212.400 and BACT are as stringent or more stringent than the limits imposed by the applicable rules.*

*However, the BACT requirements do not waive or vary any monitoring or record keeping requirements of the NSPS and NESHAP rules.}*

**J.17. Mercury into the Pyroprocessing System Limited.** The total mass of mercury compounds introduced into the pyroprocessing system, expressed as Hg, in raw mill feed and fuels shall not exceed 122 pounds per consecutive 12-month period. Annual emissions based on materials and fuel analysis. [Permit No. 0010087-031-AC]

**J.18. Hydrated Lime Injection.** The owner or operator shall control emissions of SO<sub>2</sub> through design and control of the clinker production process. The owner or operator shall use hydrated lime injection or other control techniques when necessary to achieve the SO<sub>2</sub> emission limits. [Permit No. 0010087-031-AC]

#### **PERFORMANCE RESTRICTIONS**

**J.19. Methods of Operation for the DSI System.** The DSI system shall inject sorbent between the kiln ID fan outlet and the main kiln baghouse primarily to control Hg emissions from the kiln. [Permit No. 0010087-065-AC]

**J.20. Authorized Sorbents.** The owner or operator is authorized to use activated carbon, sodium bicarbonate, hydrated lime, and sodium sesquicarbonate (trona) as sorbents for the DSI system. The owner or operator shall notify the Department of the use of a new sorbent (i.e., a sorbent not authorized by Permit No. 0010087-065-AC). Submit the notification to [DARM\\_Permitting@dep.state.fl.us](mailto:DARM_Permitting@dep.state.fl.us). [Permit No. 0010087-065-AC]

*{Permitting Note: Per Rule 62-213.410, Changes Without Permit Revision, F.A.C ([Link to Rule](#)) the permittee may take advantage of this rule where appropriate.}*

**J.21. Dry Scrubber Operating Limits.** Compliance with HCl emissions limits in Rule 62-204.800(9)(f), F.A.C. shall be demonstrated by Performance test (Method 321 at appendix A of 40 CFR Part 63) or HCl CEMS if a wet scrubber or dry scrubber is not used, as specified in 40 CFR 60.2710(j). If the permittee uses a dry scrubber to comply with the emission limitations in Rule 62-204.800(9)(f), F.A.C., the permittee must measure the injection rate of each sorbent during the performance testing, if hydrogen chloride is not continuously monitored through an HCl CEMS. The operating limit for the injection rate of each sorbent is calculated as the lowest 1-hour average injection rate of each sorbent measured during the most recent performance test demonstrating compliance with the hydrogen chloride emission limitations. [Rule 62-204.800(9)(f), FAC; and 40 CFR 60.2675(g) & 60.2710(j)]

**J.22. Dry Scrubber Monitoring Requirements.** If the permittee uses a dry scrubber to comply with the emission limits in Rule 62-204.800(9)(f), F.A.C., the permittee must monitor the injection rate of each sorbent and maintain the 3-hour block averages at or above the operating limits established during the hydrogen chloride performance test. [Rule 62-204.800(9)(f), FAC; and 40 CFR 60.2730(s)]

*{Permitting note: The injection rate and operating limits addressed in **Specific Conditions J.21 and J.22** only apply if injection of sorbent is used to demonstrate compliance with a DDDD pollutant that is not continuously monitored as described in 40 CFR 60, Subpart DDDD.}*

#### **EMISSION LIMITATIONS AND STANDARDS**

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

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**J.23. Hours of Operation.** This unit may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200(PTE), F.A.C.]

#### (LLL) EMISSION STANDARDS AND OPERATING LIMITS

**J.24. (LLL) Pollutant Emissions Limits.** Emissions shall not exceed the following limits for the following pollutants. Emissions from the raw mill air heater are included in the limits below.

| POLLUTANT                     | EMISSION LIMIT                                                          |                                                  | COMPLIANCE METHOD & AVERAGING TIME                             | BASIS               |
|-------------------------------|-------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------------------|---------------------|
| Opacity                       | 10% opacity                                                             |                                                  | COMS/Annual Method 9<br>30 minutes                             | BACT <sup>1</sup>   |
| PM                            | 0.23lb/ton of clinker                                                   | BACT equivalent<br>28.8 lb/hr<br>125.9 TPY       | RM-Up only Annual Method<br>5<br>3-hours average               | BACT <sup>1,2</sup> |
|                               | 0.07 lb/ton clinker                                                     |                                                  | Periodic Method 5, 3-hr/<br>PM-CPMS, 30-kiln operating<br>days | LLL <sup>3</sup>    |
| PM <sub>10</sub>              | 0.20 lb/ton of clinker                                                  | BACT equivalent<br>25.0 lb/hr<br>109.5 TPY       | RM-Up only Annual Method<br>5<br>3-hour average                | BACT <sup>1,2</sup> |
| SO <sub>2</sub>               | 0.28 lb/ton of clinker                                                  | BACT equivalent 35.0<br>lb/hour<br>153.3 TPY     | Annual Method 6 or 6C<br>3-hr avg. <sup>4</sup>                | BACT <sup>2</sup>   |
| NO <sub>x</sub>               | 1.95 lb/ton of clinker                                                  | BACT equivalent<br>243.75 lb/hour<br>1067.63 TPY | CEMS<br>30-day rolling average                                 | BACT <sup>2</sup>   |
| CO                            | 3.6 lb/ton of clinker                                                   | BACT equivalent<br>450.0 lb/hour<br>1971.0 TPY   | CEMS<br>24-hours average                                       | BACT <sup>2,5</sup> |
| VOC                           | 0.12 lb/ton of clinker                                                  | BACT equivalent<br>15.0 lb/hour<br>65.7 TPY      | Method 25/25A,<br>THC CEMS is only for<br>reasonable assurance | BACT <sup>2</sup>   |
| THC                           | 24 ppmvd 7% O <sub>2</sub>                                              |                                                  | CEMS<br>30-kiln operating days                                 | LLL <sup>3</sup>    |
| Mercury                       | —<br>122 lb/yr                                                          |                                                  | Fuels Material Balance<br>12-month                             | BACT <sup>6</sup>   |
|                               | 55 lb/mmton clinker                                                     |                                                  | CEMS or sorbent trap<br>30-kiln operating days                 | LLL <sup>3</sup>    |
| HCl                           | 3 ppmvd 7% O <sub>2</sub>                                               |                                                  | CEMS or surrogate                                              | LLL <sup>3</sup>    |
| Dioxin/Furan                  | 0.4 (< 400 degF)<br>0.2 (> 400 degF)<br>ng/dscm 7% O <sub>2</sub> (TEQ) |                                                  | 30-month Method 23<br>9-hr avg.                                | LLL <sup>3</sup>    |
| Baghouse inlet<br>Temperature | Baghouse Temperature (T) < T during<br>Dioxin/Furan Tests               |                                                  | Continuous, 180-min avg<br>establish each D/F tests            | LLL <sup>3</sup>    |

[1] PM compliance demonstration may suffice for PM<sub>10</sub> compliance demonstration. The averaging times for PM and PM<sub>10</sub> correspond to the required length of sampling for the initial and subsequent emission tests. The minimum sample volume shall be 30 dry standard cubic feet. PM emissions compliance, monitoring requirements and tests shall be in accordance with 40 CFR 63.1348(b)(2); 40 CFR 63.1350(b)(i)-(iv) and 40 CFR 63.1349(b)(i)-(vi). Once LLL or DDDD demonstrates compliance by CPMS then opacity by COMS not required.

[2] BACT limits established in Permit No. 0010087-031-AC (PSD-FL-228C) and 0010087-049-AC.

[3] see NESHAP Subpart LLL **Conditions, J.24. (LLL) to J.36 (LLL)** for more details. 30 kiln-operating days is

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defined in 40 CFR 63.1341. Oxygen monitoring is required for NESHAP LLL compliance to correct to 7% O<sub>2</sub>. LLL pollutants compliance by CMS shall exclude all data during periods of startup and shutdown per 40 CFR 63.1343(a). HCl compliance may be demonstrated by surrogate monitoring by SO<sub>2</sub> CEMS or by minimal sorbent injection rate. See 40 CFR 63.1349(b)(6), CFR 63.1350(l)(3), and 63.1350(m) for details on HCl monitoring requirements. CEMS shall be certified per 40 CFR 60 App. F. HCl emissions monitoring requirements shall be in accordance with 40 CFR 63.1350(l). Dioxin/furans emissions compliance, monitoring requirements and tests shall be in accordance with 40 CFR 63.1348(a)(3); 40 CFR 63.1350(g) (1) - (5) and 40 CFR 63.1349(b)(3)

[4] Compliance with SO<sub>2</sub> limit shall be demonstrated by annual stack test. [0010087-054-AC]

[5] The CO limits will be a 24-hour limit. The averaging time for CO shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours (0010087-054-AC).

[6] Compliance with NESHAP LLL suffices to demonstrate compliance to the Hg BACT limit. Hg material balance determined by raw materials and fuels entering the process. LLL Hg limit compliance presumes Hg BACT compliance. Mercury initial emissions compliance, continuous emissions compliance and monitoring requirements shall be in accordance with 40 CFR 63.1348(a)(5), 40 CFR 63.1348(b)(7) and 40 CFR 63.1350(k).

Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at 90-100% of the maximum operating rate allowed by the permit.

[Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. 0010087-031-AC, 0010087-049-AC, 0010087-054-AC, 0010087-055-AC, 0010087-061-AC (PSD-FL-228J and PSD-FL-350(H)); NESHAP Subpart LLL; 40 CFR 63.1343]

*{Permitting Note: The kiln emission rate includes fuel oil combustion emission of NO<sub>x</sub>, SO<sub>2</sub>, CO, PM, PM<sub>10</sub>, VOC from the raw mill air heater. The following conditions J.24 (LLL) to J.36 (LLL) apply only if the kiln unit is subject to NESHAP Subpart LLL. The following conditions J.37 (DDDD) to J.51. (DDDD) apply only if the kiln unit is subject to NSPS Subpart DDDD. Requirements of 40 CFR 241 to identify a non-hazardous secondary material as a non-solid waste fuel is a requirement only if the facility is subject to LLL.}*

#### (LLL) MONITORING AND COMPLIANCE PROVISIONS

- J.25. (LLL) Continuous Compliance.** For purposes of NESHAP 40 CFR 63 Subpart LLL continuous compliance with the PM, Hg, HCl and THC standards of 40 CFR 63.1343 (**Specific Condition No. J.24.**) shall be demonstrated using data collected from PM, Hg, and HCl CEMS/CPMS/sorbent traps and flow rate monitoring in accordance with 63.1348, and 63.1350(b), (i), (k), (l), and (n). [40 CFR 63.1343(a)]
- J.26. (LLL) Baghouse Temperature Monitor.** A continuous temperature monitor shall be calibrated, operated, and maintained at the inlet to the baghouse for the kiln system exhaust in accordance with the Dioxin /Furan (D/F) monitoring requirements of NESHAP 40 CFR 63 Subpart LLL 40 CFR 63.1350(g). [40 CFR 63.1350(g)(1) – (5)]
- J.27. (LLL) Development and Submittal (Upon Request) of Monitoring Plans.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements in 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o)(1) – (6), and 40 CFR 63.8(f). [40 CFR 63.1350(p)(1) – (4)]
- J.28. (LLL) NESHAP Startup and Shutdown Requirements.** During periods of startup and shutdown the requirements listed in (1) through (4) of this Condition must be met.
- During startup any one or combination of the following clean fuels must be used: 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.
  - Combustion of the primary kiln fuel may commence once the kiln temperature reaches 1200 degrees Fahrenheit.

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- c. All dry sorbent and activated carbon systems that control hazardous air pollutants must be turned on and operating at the time the gas stream at the inlet to the baghouse or ESP reaches 300 degrees Fahrenheit (five-minute average) during startup. Temperature of the gas stream is to be measured at the inlet of the baghouse or ESP every minute. Such injection systems can be turned off during shutdown. Particulate control and all remaining devices that control hazardous air pollutants should be operational during startup and shutdown.
- d. Records as specified in 40 CFR 63.1355 **Specific Condition No. J.36.**, must be kept during periods of startup and shutdown.

[Rule 62-204.800, F.A.C.; and 40 CFR 63.1346(g)]

**J.29. (LLL) Allowable Data Exclusions.** NESHAP 40 CFR 63 LLL compliance data exclusions must only abide by the following definitions as defined in NESHAP 40 CFR 63 LLL:

- a. Startup means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.
- b. Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

[40 CFR 63.1341]

**J.30. (LLL) Clinker Production Monitoring Requirements.** The permittee must determine hourly clinker production per 40 CFR 63.1350(d). [40 CFR 63.1348(b)(1)(iv); and 40 CFR 63.1350(d)(1)(i) – (ii), (2) – (4)]

**J.31. (LLL) D/F Compliance Testing.** Dioxins/furans (D/F) tests shall be conducted in accordance with the provisions of 40 CFR 63.1348(a)(3), and 63.1349(b)(3). Frequency of testing shall be in accordance with the requirements of 40 CFR 63.1348(c) and 63.1349(c) (i.e., every 30 months, or upon making a change in operations that may adversely affect compliance with the standard. [Rules 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8; 40 CFR 63.1348 and 1349(b)]

**J.32. (LLL) Operation and Maintenance Plan Requirements.** The permittee shall prepare, for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan must be submitted to the Compliance Authority and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits, including fugitive dust control measures for open clinker piles of 40 CFR 63.1343, 40 CFR 63.1345, and 40 CFR 63.1346. The operations and maintenance plan must address periods of startup and shutdown.
- b. Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3);
- c. 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.

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347]

*{Permitting Note: In the event the oxygen monitor is not operating a default stack gas oxygen concentration of 16 percent may be applied}.*

### (LLL) NOTIFICATION, REPORTING AND RECORDKEEPING

**J.33. (LLL) Notifications.** Each owner or operator subject to the requirements of LLL shall comply with the notification requirements in 40 CFR 63.9 as follows:

- a. Notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e).
- b. Notification, as required by 40 CFR 63.9(g), of the date that the continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.

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- c. Notification of compliance status, as required by 40 CFR 63.9(h).
- d. Within 48 hours of an exceedance that triggers retesting to establish compliance and new operating limits, notify the appropriate permitting agency of the planned performance tests. The notification requirements of 40 CFR 63.7(b) and 40 CFR 63.9(e) do not apply to retesting required for exceedances.

[40 CFR 63.1353]

**J.34. (LLL) Semiannual Report.** The owner or operator shall submit a summary report semiannually to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). [Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1354(b)(8-10)]

**J.35. (LLL) Continuous Flow Rate Monitoring System.** The facility must install, operate, calibrate, and maintain instruments, according to the requirements 40 CFR 63.1350(n)(1), (2) (4) – (10), for continuously measuring and recording the stack gas flow rate to allow determination of the pollutant mass emissions rate to the atmosphere from sources subject to an emissions limitation that has a pound per ton of clinker unit and that is required to be monitored by a CEMS. [40 CFR 63.1350(n)(1), (2) (4) – (10)]

**J.36. (LLL) Recordkeeping Requirements.** The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a computer, on floppy disks, on magnetic tape, or on microfiche. [40 CFR 63.1355(a) – (h)]

#### BEGINNING OF DDDD CONDITIONS

#### (DDDD) EMISSION LIMITATIONS AND OPERATING LIMITS

**J.37. (DDDD) NSPS - Pollutant Emissions Limits.** Emissions shall not exceed the following limits for the following pollutants. Emissions from the natural gas fired air heater are included in the limits below.

| POLLUTANT        | EMISSION LIMIT         |                                            | COMPLIANCE METHOD & AVERAGING TIME                                                                                              | BASIS                                                   |
|------------------|------------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Opacity          | 10% opacity            |                                            | COMS/Annual Method 9<br>30 minutes                                                                                              | BACT <sup>1</sup>                                       |
| PM               | 0.23lb/ton of clinker  | BACT equivalent<br>28.8 lb/hr<br>125.9 TPY | Method 5<br>3-hours average                                                                                                     | BACT <sup>1,2,6</sup>                                   |
|                  | 0.07 lb/ton of clinker |                                            | 30-kiln operating day<br>rolling of CPMS<br>monitoring and Annual<br>(or greater) Method 5,<br>Raw Mill-up and Raw<br>Mill down | Rule 62-<br>204.800(9)(f)5.b.,<br>F.A.C. <sup>3,9</sup> |
| PM <sub>10</sub> | 0.20 lb/ton of clinker | BACT equivalent<br>25.0 lb/hr<br>109.5 TPY | Annual Method 5<br>3-hour average                                                                                               | BACT                                                    |
| SO <sub>2</sub>  | 0.28 lb/ton of clinker | BACT equivalent<br>35.0 lb/hour            | 5-yr Method 6 or 6C<br>3 hours <sup>4</sup>                                                                                     | BACT <sup>2,4</sup>                                     |

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| POLLUTANT             | EMISSION LIMIT                                                                                                                                                                                       |                                                  | COMPLIANCE METHOD & AVERAGING TIME                                      | BASIS                  |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------------------------------------------------------------|------------------------|
|                       |                                                                                                                                                                                                      | 153.3 TPY                                        |                                                                         |                        |
|                       | 600 parts per million dry volume (ppmvd) @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                    |                                                  | Method 6 or 6C<br>3 hours <sup>4</sup>                                  | DDDD <sup>3,7,9</sup>  |
| NO <sub>x</sub>       | 1.95 lb/ton of clinker                                                                                                                                                                               | BACT equivalent<br>243.75 lb/hour<br>1067.63 TPY | CEMS<br>12-Months                                                       | BACT <sup>2,7</sup>    |
|                       | 630 ppmvd @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                                                   |                                                  | CEMS<br>30 day rolling average                                          | DDDD <sup>3,9</sup>    |
| CO                    | 3.6 lb/ton of clinker                                                                                                                                                                                | BACT equivalent<br>450.0 lb/hour<br>1971.0 TPY   | CEMS<br>24-hour average                                                 | BACT <sup>2,5,7</sup>  |
|                       | 790 ppmvd @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                                                   |                                                  | CEMS<br>30 day rolling average                                          | DDDD <sup>3,9</sup>    |
| VOC                   | 0.12 lb/ton of clinker                                                                                                                                                                               | BACT equivalent<br>15.0 lb/hour<br>65.7 TPY      | CEMS<br>12-months                                                       | BACT <sup>2</sup>      |
| Mercury               | 122 lb/yr                                                                                                                                                                                            |                                                  | Fuels, Material Balance<br>12-month                                     | BACT <sup>8</sup>      |
|                       | 58 lb/mmton clinker (after Subpart DDDD Compliance Date)                                                                                                                                             |                                                  | CEMS or sorbent trap<br>Daily rolling 30-operating days                 | DDDD <sup>6,9</sup>    |
| Hydrochloric Acid HCl | 3.0 ppmvd @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                                                   |                                                  | CEMS<br>30 day rolling average                                          | DDDD <sup>3,9</sup>    |
| Dioxin/Furan          | Total mass basis: 1.3 nanograms per dscm (ng/dscm) @ 7% O <sub>2</sub> ,<br><b>Or</b><br>Toxic Equivalent (TEQ) basis:<br>0.075 ng TEQ/dscm @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date) |                                                  | Annual or greater,<br>Method 23<br>3-run average (minimum 4 dscm)       | DDDD <sup>3,9,11</sup> |
| Cadmium               | 0.0014 mg/dscm @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                                              |                                                  | Annual or greater<br>Method 29                                          | DDDD <sup>3,9,10</sup> |
| Lead                  | 0.014 mg/dscm @ 7% O <sub>2</sub> (after Subpart DDDD Compliance Date)                                                                                                                               |                                                  | 3-run average (collect a minimum volume of 2 dry standard cubic meters) |                        |

[1] PM compliance demonstration may suffice for PM<sub>10</sub> compliance demonstration. Once LLL or DDDD demonstrates compliance by CPMS then opacity by COMS not required.

[2] Original BACT limits revised in Permit No. 0010087-0031-AC. SO<sub>2</sub> BACT limit compliance demonstration by annual stack testing per 0010087-054-AC.

[3] The emission limitations apply at all times the unit is operating including and not limited to startup, shutdown, or malfunction. See NSPS Subpart DDDD conditions, **J.37.-(DDDD) to J.51.-(DDDD)** for more details.

CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content. Operate all CEMS in accordance with the applicable procedures under appendices B and F of 40 CFR 60. [40 CFR 2710(U)]

[4] Compliance with SO<sub>2</sub> limit shall be demonstrated by annual stack test. [0010087-054-AC]

## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

### Subsection J. EU010 In-Line Kiln/Raw Mill System - Line 2

| POLLUTANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EMISSION LIMIT | COMPLIANCE METHOD & AVERAGING TIME | BASIS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|------------------------------------|-------|
| <p>[5] Continuous process monitors for CO and/or O<sub>2</sub> to optimize combustion conditions for pollution control shall be part of the process. CO emission compliance is by CEMS.</p> <p>[6] Compliance with DDDD-111(d) plan PM, Hg limit suffices to demonstrate compliance to the PM, PM<sub>10</sub> and Hg BACT limits.</p> <p>[7] Demonstration of compliance to the current Title V permit limits will also demonstrate compliance to CISWI limits of NO<sub>x</sub>, CO and SO<sub>2</sub>. (DDDD) CO, NO<sub>x</sub> and SO<sub>2</sub> compliance. Compliance may be demonstrated by using CEMS or periodic stack testing per 40 CFR 60.2710(b), 40 CFR 60.2710(g).</p> <p>[8] Hg BACT limit determined by material balance determined by raw materials and fuels entering the process. See <b>Condition J.17. (DDDD)</b> Hg limit compliance presumes Hg BACT compliance.</p> <p>[9] Subpart DDDD compliance date is the sooner of a) one year after “effective date” of EPA approval 111(d) plan, or b) February 7, 2018.</p> <p>[10] The facility is conducting stack tests to demonstrate compliance at the frequency as stated in <b>Condition J.46. (DDDD)</b>.</p> <p>[11] Determine TEQ and mass-based D/F values per 40 CFR 60.2690(G) and (J), respectively. Dioxin/furans emissions TEQ and TMB can be determine by following the procedures in accordance with 40 CFR 60.2690(g)(1) - (4) and 40 CFR 60.2690(j)(1) - (3).</p> |                |                                    |       |

[Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. 0010087-031-AC (PSD-FL-228C); 0010087-049-AC PSD-FL 228G and PSD-FL-350E, 0010087-054-AC, 0010087-055-AC; 0010087-061-AC (PSD-FL-228J and PSD-FL-350(H); 40 CFR 60.2710(a)(1) and (b)]

#### **(DDDD) PERFORMANCE TESTING**

**J.38. (DDDD) – PM CPMS Requirements.** If the facility uses a PM CPMS to demonstrate compliance, the facility must establish the PM CPMS operating limit and determine compliance with it according to 40 CFR 60.2675(i)(1) – (5). [40 CFR 60.2675(i)(1) – (5)]

**J.39. (DDDD) Initial and Annual Performance Testing.**

- a. All performance tests must consist of a minimum of three test runs conducted under conditions representative of normal operations.
- b. The facility must document that the waste burned during the performance test is representative of the waste burned under normal operating conditions by maintaining a log of the quantity of waste burned (as required in 40 CFR 60.2740(b)(1)), and the types of waste burned during the performance test.
- c. All performance tests must be conducted using the minimum run duration specified in tables 2 and 6 through 9 of 40 CFR 60 Subpart, DDDD or as per the 111(d) Plan based on FDEP rule 62-204.800(9)(f), F.A.C.

[40 CFR 60.2690(a), (b), (c); and FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines 40 CFR 60 Subpart DDDD emission guidelines]

**J.40. (DDDD) Date to Conduct Initial Performance Test.**

- a. The initial performance test must be conducted no later than 180 days after the final compliance date of February 7, 2018.
- b. If the facility commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility and the facility conducted a test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the reintroduction of that solid waste in the combustion chamber, the facility does not need to retest until 6 months from the date the facility reintroduces that solid waste.
- c. If the facility commences or recommences combusting a solid waste at an existing combustion unit at any commercial or industrial facility and the facility have not conducted a performance test consistent with the provisions of this subpart while combusting the given solid waste within the 6 months preceding the

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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reintroduction of that solid waste in the combustion chamber, the facility must conduct a performance test within 60 days from the date the facility reintroduces solid waste.

[40 CFR 60.2705(a), (b), (c)]

**J.41. (DDDD) Date to Conduct the Initial Air Pollution Control Device Inspection.**

- a. The initial air pollution control device inspection must be conducted within 60 days after installation of the control device and the associated CISWI unit reaches the charge rate at which it will operate, but no later than 180 days after the final compliance date for meeting the amended emission limitations.
- b. Within 10 operating days following an air pollution control device inspection, all necessary repairs must be completed unless the owner or operator obtains written approval from the state agency establishing a date whereby all necessary repairs of the designated facility must be completed

[40 CFR 60.2706(a), (b); and 40 CFR 60.2716]

**(DDDD) CONTINUOUS COMPLIANCE**

**J.42. (DDDD) Exemptions during Performance Testing.** Operation above the established maximum, below the established minimum, or outside the allowable range of the operating limits specified in **Table J.37.- DDDD** constitutes a deviation from the operating limits established under DDDD, except during performance tests conducted to determine compliance with the emission and operating limits or to establish new operating limits. Operating limits are confirmed or reestablished during performance tests. [40 CFR 60.2710(c)]

**J.43. (DDDD) Periodic Performance Tests (D/F, Pb, Cd, HCl).** For waste-burning kilns, the facility must conduct an annual performance test for the pollutants (except mercury and particulate matter, and hydrogen chloride if no acid gas wet scrubber is used) listed in table 8 of Subpart DDDD. If the facility does not use an acid gas wet scrubber or dry scrubber, the facility must determine compliance with the hydrogen chloride emissions limit according to the requirements of 40 CFR 60.2710(j)(1). [40 CFR 60.2710(j)(1) and (2)]

**J.44. (DDDD) Hg Monitoring.** Hg monitoring must be performed as stated in the State 111(d) Plan per FDEP rule 62-204.800(9)(f), F.A.C.

[FDEP 111(d) plan adoption of per Rule 62-204.800(9)(f), F.A.C., of 40 CFR 60 Subpart DDDD emission guidelines 40 CFR 60 Subpart DDDD emission guidelines]

**J.45. (DDDD) Interval of Annual Performance Tests.**

The facility must conduct annual performance tests between 11 and 13 months of the previous performance test. The facility may conduct a repeat performance test at any time to establish new values for the operating limits. The facility must repeat the performance test if the feed stream is different than the feed streams used during any performance test used to demonstrate compliance. [40 CFR 60.2715 and 40 CFR 60.2725]

**J.46. (DDDD) Performance Testing Less Often.** At a minimum, the facility must conduct annual performance tests per 40 CFR 2715 (**Specific Condition No J.45.**), with the following exceptions:

- a. The facility may conduct a repeat performance test at any time to establish new values for the operating limits to apply from that point forward, as specified in 40 CFR 60.2725 (**Specific Condition No. J.45.**
- b. The facility must repeat the performance test within 60 days of a process change, as defined in 40 CFR 60.2875 (**Specific Condition No. J.48.**)
- c. If the initial or any subsequent performance test for any pollutant in table above demonstrates that the emission level for the pollutant is no greater than the emission level specified in (c)(1) of this **Specific Condition** and the facility is not required to conduct a performance test for the pollutant in response to a request by the Administrator or a process change (see “process change” definition below), the facility may elect to skip conducting a performance test for the pollutant for the next 2 years. The facility must conduct a performance test for the pollutant during the third year and no more than 37 months following the previous performance test for the pollutant. For cadmium and lead, both cadmium and lead must be emitted at emission levels no greater than their respective emission levels specified in (1) of this **Specific Condition** for the facility to qualify for less frequent testing:

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- (1) For particulate matter, hydrogen chloride, mercury, carbon monoxide, nitrogen oxides, sulfur dioxide, cadmium, lead, and dioxins/furans, the emission level equal to 75 percent of the applicable emission limit to this given in **Table 8 of Subpart DDDD**; and
- d. If the facility is conducting less frequent testing for a pollutant as provided above and a subsequent performance test for the pollutant indicates that DDDD unit does not meet the emission level specified in paragraph (i) above the facility must conduct annual performance tests for the pollutant according to the schedule specified above until the facility qualify for less frequent testing for the pollutant. Process change means any of the following physical or operational changes:
  - (1) A physical change (maintenance activities excluded) to the DDDD unit which may increase the emission rate of any air pollutant to which a standard applies;
  - (2) An operational change to the Subpart DDDD unit where a new type of non-hazardous secondary material is being combusted;
  - (3) A physical change (maintenance activities excluded) to the air pollution control devices used to comply with the emission limits for the Subpart DDDD unit (e.g., replacing an electrostatic precipitator with a fabric filter); and
  - (4) An operational change to the air pollution control devices used to comply with the emission limits for the affected Subpart DDDD unit (e.g., change in the sorbent injection rate used for activated carbon injection).

[40 CFR 60.2720(a); and 40 CFR 60.2875]

#### **J.47. (DDDD) Monitoring Equipment and Monitoring Parameters.**

- a. For waste-burning kilns not equipped with a wet scrubber or dry scrubber, in place of hydrogen chloride testing with EPA Method 321 at 40 CFR part 63, appendix A, an owner or operator must install, calibrate, maintain, and operate a CEMS for monitoring hydrogen chloride emissions, as specified in 40 CFR 60.2710(j), discharged to the atmosphere and record the output of the system.
- b. To demonstrate continuous compliance with the particulate matter emissions limit, a facility may substitute use of either a particulate matter CEMS or a particulate matter CPMS for conducting the particulate matter annual performance test and other CMS monitoring for PM compliance (e.g., bag leak detectors, ESP secondary power, PM scrubber pressure).
- c. Waste-burning kilns must install, calibrate, maintain, and operate a mercury CEMS as specified in 40 CFR 60.2710(j)(2).
- d. To demonstrate continuous compliance with the nitrogen oxides emissions limit, a facility may substitute use of a CEMS for the nitrogen oxides annual performance test to demonstrate compliance.

[40 CFR 60.2730(g-h) and (k) and 40 CFR 60.2710(j)]

#### **J.48. (DDDD) Allowable Data Exclusions.** CEMS data during startup and shutdown, as defined in this subpart, are not corrected to 7 percent oxygen, and are measured at stack oxygen content.

- a. Startup means the time from when a shutdown kiln first begins firing fuel until it begins producing clinker. Startup begins when a shutdown kiln turns on the induced draft fan and begins firing fuel in the main burner. Startup ends when feed is being continuously introduced into the kiln for at least 120 minutes or when the feed rate exceeds 60 percent of the kiln design limitation rate, whichever occurs first.
- b. Shutdown means the cessation of kiln operation. Shutdown begins when feed to the kiln is halted and ends when continuous kiln rotation ceases.

[40 CFR 60.2875]

#### **J.49. (DDDD) Control Equipment Inspections.** If the facility uses an air pollution control device to meet the emission limitations in this Subpart DDDD, the facility must conduct an initial and annual inspection of the air pollution control device. The inspection must include, at a minimum, the following:

- a. Inspect air pollution control device(s) for proper operation; and

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- b. Develop a site-specific monitoring plan according to the requirements in 40 CFR 60.2710(l) of this **Specific Condition**. This requirement also applies to the facility if the facility petition the EPA Administrator for alternative monitoring parameters under 40 CFR 60.13(i).
- c. For each CMS required in this section, the facility must develop and submit to the EPA Administrator for approval a site-specific monitoring plan according to the requirements of (l) that addresses (1)(i) through (vi) of this **Specific Condition**:
  - (1) The facility must submit this site-specific monitoring plan at least 60 days before the initial performance evaluation of the continuous monitoring system:
    - (i). Installation of the continuous monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device);
    - (ii). Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer and the data collection and reduction systems;
    - (iii). Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations);
    - (iv). Ongoing operation and maintenance procedures in accordance with the general requirements of 40 CFR 60.11(d);
    - (v). Ongoing data quality assurance procedures in accordance with the general requirements of 40 CFR 60.13; and
    - (vi). Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 40 CFR 60.7(b), (c), (c)(1), (c)(4), (d), (e), (f) and (g).
  - (2) The facility must conduct a performance evaluation of each continuous monitoring system in accordance with the site-specific monitoring plan.
  - (3) The facility must operate and maintain the continuous monitoring system in continuous operation according to the site-specific monitoring plan.

[40 CFR 60.2710(k-l)]

#### (DDDD) OPERATOR TRAINING AND QUALIFICATION

##### J.50. (DDDD) Operator Training and Qualifications.

- a. No CISWI unit can be operated unless a fully trained and qualified CISWI unit operator is accessible, either at the facility or can be at the facility within 1 hour. The trained and qualified CISWI unit operator may operate the CISWI unit directly or be the direct supervisor of one or more other plant personnel who operate the unit. If all qualified CISWI unit operators are temporarily not accessible, the facility must follow the procedures in 40 CFR 60.2665.
- b. Operator training and qualification must be obtained through a state-approved program or by completing the requirements included in (c) of his **Specific Condition**.
- c. Training must be obtained by completing an incinerator operator training course that includes, at a minimum, the three elements described in 40 CFR 60.2635(a). [40 CFR 60.2635(a); and 40 CFR 60.2645]
- d. The operator training course must be completed by the later of
  - (1) February 7, 2018;
  - (2) Six months after CISWI unit startup; and
  - (3) Six months after an employee assumes responsibility for operating the CISWI unit or assumes responsibility for supervising the operation of the CISWI unit. [40 CFR 60.2640(a), (b), and (c)]
- e. To maintain qualification, the facility must complete an annual review or refresher course covering, at a minimum, the five topics described in 40 CFR 60.2350(a) – (e).
- f. Annual review or refresher requirements are described in e., above. Documentation must be available at the facility and readily accessible for all CISWI unit operators that addresses 40 CFR 60.2660(a)(1) - (10).

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[40 CFR 60.2635(a), 60.2640(a), (b), and (c), 60.2650 (a) – (e), 60.2660(a), (b), (c)(1) – (3), 60.2655, and 60.2665]

#### (DDDD) RECORDKEEPING AND REPORTING

**J.49. (DDDD) Records to Keep.** The facility must maintain the items as applicable as specified below for a period of at least 5 years:

- a. Calendar date of each record;
- b. Records of the data described below:
  - (1) The DDDD unit charge dates, times, weights, and hourly charge rates;  
*{Permitting note: Because permittee uses a NO<sub>x</sub> CEMS for monitoring compliance, monitoring of charge rate, secondary chamber temperature and reagent flow for selective noncatalytic reduction is not required per 40 CFR 60.2730(k).}*
  - (2) For affected CISWI units that establish operating limits for controls other than wet scrubbers under 40 CFR 60.2675(d) through (g) or 40 CFR 60.2680, the facility must maintain data collected for all operating parameters used to determine compliance with the operating limits.
  - (3) If a fabric filter is used to comply with the emission limitations, the facility must record the date, time, and duration of each alarm and the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken. The facility must also record the percent of operating time during each 6-month period that the alarm sounds, calculated as specified in 40 CFR 60.2675(c):
- c. Identification of calendar dates and times for which data show a deviation from the operating limits in **Table DDDD, J.37.** above or a deviation from other operating limits with a description of the deviations, reasons for such deviations, and a description of corrective actions taken.
- d. The results of the initial, annual, and any subsequent performance tests conducted to determine compliance with the emission limits and/or to establish operating limits, as applicable. Retain a copy of the complete test report including calculations.
- e. Records showing the names of DDDD unit operators who have completed review of the information in 40 CFR 60.2660(a), as required by 40 CFR 60.2660(b), including the date of the initial review and all subsequent annual reviews.
- f. Records showing the names of the DDDD operators who have completed the operator training requirements under 40 CFR 60.2635, met the criteria for qualification under 40 CFR 60.2645, and maintained or renewed their qualification under 40 CFR 60.2650 or 40 CFR 60.2655. Records must include documentation of training, the dates of the initial and refresher training, and the dates of their qualification and all subsequent renewals of such qualifications.
- g. For each qualified operator, the phone and/or pager number at which they can be reached during operating hours.
- h. Records of calibration of any monitoring devices as required under 40 CFR 60.2730.
- i. Equipment vendor specifications and related operation and maintenance requirements for the incinerator, emission controls, and monitoring equipment.
- j. The information listed in 40 CFR 60.2660(a).
- k. On a daily basis, keep a log of the quantity of waste burned and the types of waste burned (always required).
- l. Maintain records of the annual air pollution control device inspections that are required for the kiln, any required maintenance and any repairs not completed within 10 days of an inspection or the timeframe established by the state regulatory agency.
- m. For continuously monitored pollutants or parameters, the facility must document and keep a record of the following parameters measured using continuous monitoring systems:
  - (1) All 1-hour average concentrations of SO<sub>2</sub>, NO<sub>x</sub>, CO, PM –CPMS, Hg, HCl DDDD limit emissions.  
The facility must indicate which data are CEMS data during startup and shutdown;
  - (2) All 1-hour average percent oxygen concentrations; and

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- n. If the facility chooses to stack test less frequently than annually, consistent with 40 CFR 60.2720(a) through (c) **Specific Condition No. J.46**, the facility must keep annual records that document that the emissions in the previous stack test(s) were less than 75 percent of the applicable emission limit and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year.
- o. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
- p. Records of all required maintenance performed on the air pollution control and monitoring equipment.
- q. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
- r. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1) of this chapter, the facility must keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the facility combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the facility must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the facility must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per 40 CFR 241.4, the facility must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a).

[40 CFR 60.2740(a), (b)(1)(5-6), (e-m), (n)(2-4)(6)(8-9), (q-u)]

#### J.50. **(DDDD) Report Submittal – Table of Required Reports.**

| Report              | Due date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Contents                                                                                                                                                                                                                          | Reference                          |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Initial Test Report | No later than 60 days following the initial performance test                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Complete test report for the initial performance test <ul style="list-style-type: none"><li>• The values for the site-specific operating limits</li><li>• Installation of bag leak detection systems for fabric filters</li></ul> | 40 CFR 60.2760.                    |
| Annual report       | No later than 12 months following the submission of the initial test report. Subsequent reports are to be submitted no more than 12 months following the previous report <ul style="list-style-type: none"><li>• Statement and signature by responsible official</li><li>• Date of report</li><li>• Values for the operating limits</li><li>• Highest recorded 3-hour average and the lowest 3- hour average, as applicable, for each operating parameter recorded for the calendar year being reported</li></ul> | <ul style="list-style-type: none"><li>• Name and address</li></ul>                                                                                                                                                                | 40 CFR 60.2765 and 40 CFR 60.2770. |

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|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                   |                                    |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                                         | <ul style="list-style-type: none"><li>• If a performance test was conducted during the reporting period, the results of the test</li><li>• If a performance test was not conducted during the reporting period, a statement that the requirements of 40 CFR 60.2720(a) were met</li><li>• Documentation of periods when all qualified CISWI unit operators were unavailable for more than 8 hours but less than 2 weeks</li></ul> <p>If the facility is conducting performance tests once every 3 years consistent with 40 CFR 60.2720(a), the date of the last 2 performance tests, a comparison of the emission level the facility achieved in the last 2 performance tests to the 75 percent emission limit threshold required in 40 CFR 60.2720(a) and a statement as to whether there have been any operational changes since the last performance test that could increase emissions</p> |                                                                                                                                                                                                                                                                                                                                   |                                    |
| Emission limitation or operating limit deviation report | By August 1 of that year for data collected during the first half of the calendar year. By February 1 of the following year for data collected during the second half of the calendar year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"><li>• Dates and times of deviation</li><li>• Averaged and recorded data for those dates</li></ul> <p>Duration and causes of each deviation and the corrective actions taken</p> <ul style="list-style-type: none"><li>• Copy of operating limit monitoring data and any test reports.</li></ul> | 40 CFR 60.2775 and 40 CFR 60.2780. |

[40 CFR 60.2750 to 2760]

#### J.51. (DDDD) Reports Form.

- Within 60 days after the date of completing each performance test (*see* 40 CFR 60.8) required by this subpart, the facility must submit the results of the performance test or the continuous emissions monitoring system performance evaluation via EPA via the Compliance and Emissions Data Reporting Interface (CEDRI).
- For reporting pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, the facility must submit the results of the performance evaluation to the Administrator at the appropriate address listed in 40 CFR 60.4.

[40 CFR 60.2795]

**BEGINNING OF BACT CONDITIONS - These conditions apply at all times regardless of LLL or DDDD.**

#### COMPLIANCE MONITORING

**J.52. CEMS System Requirements.** The calibration, maintenance, operation, record keeping, and reporting of the CEM system shall comply with the requirements of 40 CFR 60.7 and 60.13; 40 CFR 60 Appendix B,

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Performance Specifications; and, Appendix F, Quality Assurance Procedures. [Rule 62-210.800, 62-212.400(BACT), F.A.C., and Permit No. 0010087-031-AC]

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

- J.53. BACT Continuous Emission Monitoring Systems (CEMS).** The owner or operator shall calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the in-line kiln/raw mill stack to measure and record the emissions of NO<sub>x</sub>, 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 NO<sub>x</sub> 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 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 62-212.400(BACT), F.A.C., Permit No. 0010087-031-AC; and 0010087-061-AC]

#### TEST METHODS AND PROCEDURES

*{Permitting note: 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.54. Performance Testing.**

- a. The owner or operator shall notify the Department prior to initiating any significant change in the raw materials or fuel used in the most recent performance test for PM. For purposes of this condition this includes but is not necessarily limited to any change in the physical or chemical properties of a raw material [Note: this includes the LOI of fly ash] or fuel that is outside of the normal range of monitored parameters; the use of a raw material or fuel not previously used; or a change between non-beneficiated fly ash and beneficiated fly ash. A significant change shall not include switching to a raw material/fuel mix for which the permittee already tested in compliance with the PM emission limits. [Permit No. 0010087-049-AC]
- b. **Testing and Operating Conditions.** Emission tests shall be conducted for the pollutants in **Condition Nos. J.24. and J.37.** under the fuel firing scenario representing the highest potential for generating emissions. Changes in operating conditions that may affect the emissions of any pollutant specified in **Condition Nos. J.24. and J.37.,** shall be noticed to the Department 60 days prior to such change or as soon as practical where 60 days advanced notice is not feasible. [Permit No. 0010087-031-AC]

- J.55. Malfunction of the SNCR System.** Malfunction of the SNCR System is defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia based solutions into the kiln system. In accordance with the limits in **Condition J.24.,** the exclusion of NO<sub>x</sub> data collected during periods of malfunction and/or repair of the SNCR system is allowed when demonstrating compliance with the 30-day NO<sub>x</sub> standard. No more than 6 hours per calendar day and no more than 30 hours in any 30-day operating block may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Northeast District of any malfunction of the SNCR system. [Permit No. 0010087-031-AC]

- J.56. Data Exclusion for CO.** In accordance with the limits in **Condition J.24.,** the exclusion of CO data collected during periods of startup, shutdown, and malfunction of the kiln system is allowed when demonstrating compliance with the 24-hour lb/ton CO standard after the initial 180-day period after initial

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startup. No more than 7 hours per calendar day and no more than 28 hours in any calendar month may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Northeast District of any startup, shutdown, or malfunction of the system which an exclusion of data will occur. [Permit No. 0010087-031-AC]

#### NOTIFICATIONS, RECORDS AND REPORTS

**J.57. 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 30<sup>th</sup> day of each following month.

[Rule 62-212.400(BACT), F.A.C. and Permit No. 0010087-031-AC; and Permit No. 0010087-061-AC (PSD-FL-228J and PSD-FL-350(H))]

**J.58. 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, fly ash, 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.

[Permit No. 0010087-031-AC; and Permit No. 0010087-061-AC (PSD-FL-228J and PSD-FL-350(H))]

**J.59. Material Balance Records of Mercury.** The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and making and maintaining records of monthly and rolling 12-month mercury throughput. The owner or operator shall, for each month of sampling required by this condition, perform daily sampling of the raw mill feed, coal, petroleum coke, and tires, and shall composite the daily samples each month, and shall analyze the monthly composite sample to determine mercury content of these materials for the month. The owner or operator shall determine the mass of mercury introduced into the pyroprocessing system (in units of pounds per month) from the total of the product of the mercury content from the monthly composite analysis and the mass of each material or fuel used during the month. The consecutive 12-month record shall be determined from the individual monthly records for the current month and the preceding eleven months and shall be expressed in units of pounds of mercury per consecutive 12-month period. Such records shall be completed no later than 25 days following the month of the records. The default value for the mercury content of tires and TDF shall be 0.0081 µg/g; no additional sampling/analysis is required. To determine the mercury content of the feed material and fuels to be used in the monthly calculation, sampling and analysis shall be performed in accordance with the following schedule:

- a. During the first quarter of plant operation, sample each month analyze each month's composite sample.
- b. After the first quarter, sample for one month of each quarter and analyze that month's composite sample.

[Permit Nos. 0010087-031-AC]

*{Permitting note: this condition is sufficed by compliance to the LLL or DDDD Hg limit}*

**J.60. Records of Startup, Shutdown and Malfunction.** The owner or operator shall make and maintain records of periods of startup, shutdown and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions. [Permit No. 0010087-031-AC]

**J.61. Raw Mill Heater Fuel Oil Sulfur Content.** Compliance with the fuel sulfur content of the

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distillate oil, on-specification and off-specification used oil shall be determined by a certified ASTM fuel oil analysis or certified by fuel supplier. Records shall be retained for at least 5-years and made available to the Department upon request. [Permit No. 0010087-059-AC]

**J.62. Used Oil Shipment Records.** The permittee shall keep records of all used oil shipments accepted.

- a. Logs and shipping documents: The permittee shall keep records in a form of a log of invoices, manifests, bill of lading, or other shipping documents. Records for each shipment must include the following information:
    - (1) The name and address of the transporter who delivered the used oil;
    - (2) The name and address of the generator or processor/re-refiner from who sent the used oil;
    - (3) The EPA identification number of the transporter who delivered the used oil;
    - (4) The EPA identification number (if applicable) of the generator or processor/re-refiner who sent the used oil;
    - (5) The quantity of used oil accepted; and
    - (6) The date of acceptance.
  - b. Retention of Records: All records and shipping documents shall be maintained on site for at least 3-years.
- [Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart G; Permit No. 0010087-059-AC]

**J.63. Used Oil Total Halogen Concentration Records.**

- a. Total Halogens above or below 1,000 ppm: The permittee shall keep records in a form of a log the total halogen concentration of the used oil. The records shall include the following information:
  - (1) The date tested and test results; or
  - (2) The processor/re-refiner fuel specifications certifying the used oil meets the allowable levels and fuel specifications.
- b. Total Halogens > 1,000 ppm: The permittee shall keep records in a form of a log of the test results demonstrating that the off-specification used oil contains < 4,000 ppm total halogens and does not contain significant concentrations of halogenated hazardous constituents listed in 40 CFR 261, Appendix VIII.
- c. Retention of Records: All records shall be maintained on site for at least 3-years.

[Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart G; and, Permit No. 0010087-059-AC]

**J.64. Used Oil Certification Requirements.**

- a. Notice Certification: Before the permittee accepts the first shipment of off-specification used oil fuel from a generator, transporter, or processor/re-refiner, the permittee shall provide to the generator, transporter, or processor/re-refiner a one-time written and signed notice certifying that:
  - (1) The permittee has notified the EPA stating the location and general description of his used oil management activities; and
  - (2) The permittee will burn the used oil only in the kilns.
- b. Certification Retention: The written and signed notice certification must be maintained for 3-years from the date the facility last receives shipment of off-specification used oil from that generator, transporter, or processor/re-refiner.

[Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart G, and, Permit No. 0010087-059-AC]

**J.65. Used Oil Notification Requirements.**

- a. Identification Numbers: If the permittee has not previously complied with the notification requirements of RCRA section 3010 must comply with these requirements and obtain an EPA identification number.
- b. Mechanics of Notification: If the permittee has not received an EPA identification number shall obtain one by notifying the Regional Administrator of their used oil activity by submitting either:
  - (1) A completed EPA Form 8700-12 (To obtain EPA Form 8700-12 call RCRA/Superfund Hotline at 1-800-424-9346 or 703-920-9810); or

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- (2) A letter requesting an EPA identification number. Call the RCRA/Superfund Hotline to determine where to send a letter requesting an EPA identification number. The letter should include the following information:
- (i). Burner company name;
  - (ii). Owner of the burner company;
  - (iii). Mailing address for the burner;
  - (iv). Name and telephone number for the burner point of contact;
  - (v). Type of used oil activity; and
  - (vi). Location of the burner facility.

[Rule 62-710.200(2), F.A.C.; 40 CFR 279, Subpart G; and Permit No. 0010087-059-AC]

**J.66. Continuous Monitoring System Data.** Monitor availability for each compliance CMS shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly summary emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with another report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

*{Permitting Note: Not meeting 95% CEMS availability in a single calendar quarter does not constitute a violation of this permit condition so long as the corrective actions stipulated by the condition, i.e., submittal of a plan identifying the problems and taking corrective action in the next calendar quarter, are implemented by the permittee. Different problem(s) arising in subsequent calendar quarters with regard to CEMS availability also does not necessarily constitute a violation of this permit condition so long as corrective actions have been taken addressing any previous problem(s) and the new problem(s) do not arise from lack of maintenance, training of personnel or other negligence by the permittee. In addition, circumstances complete outside the control of the permittee, e.g. lightning strikes, that prevent 95% CEMS availability in a calendar quarter do not constitute a violation of this permit condition. Finally, continuing problems from calendar quarter to calendar quarter related to the same problem(s) that causes CEMS availability to not meet the 95% criteria could also constitute a violation of this permit condition}*

[Suffices for requirements of 40 CFR 60.2735]

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection K. EU011 Clinker Handling –Line 2**

**Subsection K. This section addresses the following emissions unit**

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

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

| <b>EMISSION POINT</b> | <b>DESCRIPTION</b>                          |
|-----------------------|---------------------------------------------|
| 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                          |

Commence Construction: 07/25/2005. Initial Startup Date: 10/07/2009.

*{Permitting Note: 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). This facility is exempted (except as provided in 40 CFR 63.1356) from otherwise applicable NSPS requirements (40 CFR 60, Subpart F).}*

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

**EMISSION LIMITATIONS AND STANDARDS**

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

**K.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants).

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**K.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry).

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

**K.3. Hours of Operation.** These units may operate continuously, i.e., 8,760 hours per year.

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

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection K. EU011 Clinker Handling –Line 2

**K.4. Maximum Rate.** The maximum rate for Clinker Handling – Line 2 is equivalent to EU010 (In-Line Kiln/Raw Mill System - Line 2) production limit in order 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.

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

**K.5. Pollutant Emissions Limits (All EPs).** Emissions shall not exceed the following limits for the following pollutants:

| POLLUTANT                               | EP               | EMISSION LIMIT                                               |                                 | COMPLIANCE METHOD & AVERAGING TIME                       | BASIS                               |
|-----------------------------------------|------------------|--------------------------------------------------------------|---------------------------------|----------------------------------------------------------|-------------------------------------|
| PM <sub>10</sub> fabric filter baghouse | 2K15             | 0.05 lb/ton of dry preheater feed;<br>0.08 lb/ton of clinker | BACT equivalent<br>10.0 lb/hour | 3 hours <sup>1</sup>                                     | BACT                                |
| PM Fabric filter baghouse               | 2K15             | 0.07 lb/ton of clinker (during normal operation)             | BACT equivalent<br>8.75 lb/hr   | Periodic Methods 5 or 5i<br>3 hours <sup>1</sup><br>CPMS | NESHAP<br>40 CFR<br>63.1343 Table 1 |
| PM - Baghouse                           | All, except 2K15 | 0.01 gr/dscf                                                 | BACT Equivalent<br>1.64 lb/hour | 3 hours <sup>1</sup>                                     | BACT                                |
| PM <sub>10</sub> Baghouse               | All, except 2K15 | 0.007 gr/dscf                                                | BACT equivalent<br>1.15 lb/hr   | 3 hours <sup>1</sup>                                     | BACT                                |
| VE                                      | All              | 10% opacity                                                  |                                 | 6-minute block averages <sup>2</sup>                     | BACT & 40 CFR 63.1345 <sup>3</sup>  |

[1] EP 2K15: The averaging times for PM and PM<sub>10</sub> correspond to the required length of sampling for the emission tests.

Meeting the LLL PM emission limit demonstrates compliance with the PM<sub>10</sub> BACT limit of 0.05 lb/ton of dry preheater feed; 0.08 lb/ton of clinker.

[2] EPs 2L03, 2L12, 2L13, 2L15, 2L16 and 2L18: The averaging time for visible emissions shall be a 6-minute block

average computed from a minimum of one measurement every 15 seconds. The 6-minute block averages shall start at the beginning of each hour. EP 2K15: Compliance with the opacity limit shall be demonstrated by the PM-CPMS. No annual testing for EP 2K15 is required per Air Construction Permit Nos. 0010087-049-AC and 0010087-055-AC (PSD-FL-228I & 350G).

[3] NESHAP Subpart LLL of 40 CFR 63 requires opacity limit for EPs 2L03, 2L12, 2L13, 2L15, 2L16 and 2L18.

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

[Rules 62-210.700(5) and 62-212.400(BACT), F.A.C.; Permit Nos. 0010087-031-AC; 0010087-049-AC; 0010087-052-AC; and 0010087-055-AC]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection K. EU011 Clinker Handling –Line 2

- K.6. O&M Plan for Baghouses.** The owner or operator shall adhere to the operation and maintenance plan (O&M plan). The O&M plan addresses the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed.

[Rule 62-204.800(11)(b)48, F.A.C.; Permit No. 0010087-031-AC; and 40 CFR 63.1347; and Permit No. 0010087-052-AC]

#### TEST METHODS AND PROCEDURES

*{Permitting Note: 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.7. Emission Tests Required.** In addition to the continuous monitoring requirements, the owner or operator shall demonstrate compliance with the emission limits annually using the test methods of 40 CFR 60 Appendix A specified below.

- a. EP 2K15: 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), once each calendar year.
- b. All EPs except EP 2K15: The Permittee shall conduct a visible emissions test at EPs 2L03, 2L12, 2L13, 2L15, 2L16, 2L18 on an annual basis, no less frequently than once every calendar year (January 1 – December 31). EP 2K15: Compliance with the opacity limit shall be demonstrated by the PM-CPMS. No annual testing for EP 2K15 is required per Air Construction Permit Nos. 0010087-049-AC and 0010087-055-AC (PSD-FL-228I & 350G).

[Permit Nos. 0010087-031-AC (PSD-FL-350A); 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H), 40 CFR 63.1349(b)(1)]

- K.8. Testing Methods.** When required, tests shall be performed in accordance with the following reference methods:

| POLLUTANT        | TEST METHOD                                            |
|------------------|--------------------------------------------------------|
| PM               | Method 5 or 5i <sup>1</sup>                            |
| PM <sub>10</sub> | Method 5, assuming all PM measured is PM <sub>10</sub> |
| 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 or near their permitted capacity per FDEP Rule, 62-297.310(3).

[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; and Permit No. 0010087-031-AC]

- K.9. Visible Emissions (EPs 2L03, 2L12, 2L13, 2L15, 2L16 and 2L18).**

**BACT Annual VE Testing Requirements.** The test method for demonstrating compliance with the 10% 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, no less frequently than once every calendar year (January 1 – December 31).

*{Permitting Note: The annual test method is in accordance with Permit No 0010087-031-AC (PSD-FL-350).*

[Permit No. 0010087-031-AC, Permit No. 0010087-061-AC (PSD-FL-228J and (PSD-FL-350(H); Rules 62-297.310(5)(b) and (8)(a)1]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection K. EU011 Clinker Handling –Line 2

- K.10. (LLL) PM (CPMS).** The facility must install, operate, calibrate, and maintain a PM CPMS in accordance with the requirements in 40 CFR 63.1350(b). The facility must conduct correlation testing to establish the parametric limit on the PM CPMS as described in 40 CFR 63.1350(b)(1)(i) – (iv). The facility must determine continuous compliance as described in 40 CFR 63.1350(b).  
[40 CFR 1349(b)(1); and 40 CFR 63.1350(b)(1)(i) – (iv)]
- K.11. (LLL) Periodic Visible Emissions - EPA Method 22 (EPs 2L03, 2L12, 2L13, 2L15, 2L16 and 2L18).**
- a.** Sources subject to a limitation on opacity under 40 CFR 63.1345 must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347). The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)), if applicable.
1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A–7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. Corrective actions.** If visible emissions are observed during any Method 22 visible emissions test conducted under **a. of this condition**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(f)(1), (f)(3)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection K. EU011 Clinker Handling –Line 2

**K.12. (LLL) Startup and shutdown Compliance.** In order to demonstrate continuous compliance during startup and shutdown, all air pollution control devices must be operating.

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1348(b)9.]

**K.13. (LLL) Opacity Monitoring Plan.** If the facility demonstrates compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350 (o) and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; and 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350 (o) (1) - (5)]

**K.14. LLL Operation and Maintenance Plan Requirements.**

- a. The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:
  - (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
  - (2) Corrective actions to be taken when required 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement in **Specific Condition No. K.11.b.***)
- b. Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347(a)(1), (2), and (b)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection L. EU012 Finish Grinding Operation- Line 2.

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

| EU No.         | Brief Description                                                                                                                   |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------|
| -012           | Finish Grinding Operations - Line 2. Emissions unit 012 shall have the following emission points controlled by following baghouses: |
| EMISSION POINT | DESCRIPTION                                                                                                                         |
| Baghouse 2M07  | Clinker from quadrated silos (Clinker to Finish Mill -2)                                                                            |
| Baghouse 2N09  | Finish Mill #2 air separator                                                                                                        |
| Baghouse 2N12  | Finish Mill #2                                                                                                                      |
| Baghouse 2N91  | Airlift to separator (Finish Mill Elevator & Airslides)                                                                             |
| Baghouse 2N36  | Cement to fringe silo                                                                                                               |
| Baghouse 2Q25  | Cement to silo #6                                                                                                                   |
| Baghouse 2Q26  | Cement to silo # 7                                                                                                                  |

Initial Startup Date: 10/07/2009.

*{Permitting Note: Emissions unit 012 is subject to 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants) adopted by reference into Rule 62.204.800(8)(b)9, F.A.C. and 40 CFR 60 Subpart A (General Provisions). This emissions unit is also subject to 40 CFR 63 Subpart LLL (National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry) adopted by reference into Rule 62.204.800(11)(b)48, F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}*

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

**L.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants).

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**L.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to and is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

#### EMISSION LIMITATIONS AND STANDARDS

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

**L.3. Hours of Operation.** These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200(PTE), F.A.C.]

**L.4. Particulate Matter.** Particulate Matter (PM) emissions from each emission point of emissions unit 012 shall not exceed 0.01 grains/dscf. Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse. PM emissions for all emission points in this emission unit are limited to 14.24 lb/hr and 62.4 tons per year.

[Permit No. 0010087-049-AC]

**L.5. PM10 Emissions.** PM<sub>10</sub> emissions shall not exceed 0.007 grains/dscf. PM<sub>10</sub> emissions for all emission points in this emission unit are limited to 9.97 lb/hr and 43.68 tons per year.

[Permit No. 0010087-049-AC]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection L. EU012 Finish Grinding Operation- Line 2.

#### L.6. Visible Emissions.

- a. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.  
[Rule 62-212.400(BACT), F.A.C.; Permit No. 0010087-031-AC]
- b. Visible emission from the finish mill shall not exceed 10% opacity.

*{Permitting Note: Compliance with this emission limit on an annual basis will be demonstrated by complying with the 5% opacity limit. LLL opacity limit per 40 CFR 63.1345 of 10 percent is demonstrated in compliance by compliance to the above BACT limit.}*

[40 CFR 60.62(c); and 40 CFR 63.1345]

#### TEST METHODS AND PROCEDURES

*{Permitting note: 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.7. Particulate Matter & PM<sub>10</sub> Testing (EPs 2N09 and 2N12).** For emission points 2N09 and 2N12, compliance testing for PM and PM<sub>10</sub> emissions from these emission points are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C.

[Rule 62-297.620(4), F.A.C.; and Air Construction Permit No. 0010087-031-AC]

- L.8. Particulate Matter & PM<sub>10</sub> Testing (For all other EPs of EU012).** Annual compliance testing for PM emissions from these emission points are waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A (1997 version).

The particulate weight emission standard and the visible emissions limit of 5% opacity are BACT.]

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

#### L.9. Visible Emissions (Each EP).

**BACT Annual VE Testing Requirements.** The test method for demonstrating compliance with the 5% 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, no less frequently than once every calendar year (January 1 – December 31).

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228.}*

[Permit No. AC01-267311/PSD-FL-228; Rules 62-297.310(5)(b) and (8)(a)1]

#### L.10. (LLL) Periodic Visible Emissions – EPA Method 22 (Each EP).

- a. This facility is subject to a limitation on opacity under 40 CFR 63.1345 (**Specific Condition No. L.6.**) must conduct required emissions monitoring in accordance with the provisions of **this Specific Condition** ((i) through (vii) (40 CFR 63.1350(f)(1)(i) - (vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347) **Specific Condition No. L.13.** The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. L.11.**, and an approved alternate monitoring requirements (40 CFR 63.1350(o)(5)), if applicable.
  1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection L. EU012 Finish Grinding Operation- Line 2.

- annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A–7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A–4. The Method 9 performance test, of Appendix A–4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. “Totally enclosed conveying system transfer point” must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A–7, according to the requirements of **(i) through (iv) of this Specific Condition** for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of **(i) through (iv) of this Specific Condition** apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.
- b. Emission Points 2N09 and 2N12. The following additional emissions monitoring requirements shall be met for a finished mill:
- i. Monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCD) of these affected sources in accordance with the procedures of Method 22 of appendix A–7 to 40 CFR 60. The duration of the Method 22 performance test must be 6 minutes.
  - ii. Within 24 hours of the end of the Method 22 performance test in which visible emissions were observed, the owner or operator must conduct a follow up Method 22 performance test of each stack from which visible emissions were observed during the previous Method 22 performance test.
  - iii. If visible emissions are observed during the follow-up Method 22 performance test required by **this Specific Condition L.10.(ii)** from any stack from which visible emissions were observed during the previous Method 22 performance test required by **this Specific Condition L.10.(a)**, the facility must conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 performance test in accordance with Method 9 of appendix A–4 to 40 CFR 60. The duration of the Method 9 test must be 30 minutes.
- c. Corrective actions. If visible emissions are observed during any Method 22 visible emissions test conducted under **this Specific Condition L.10.a**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800, F.A.C.; and 40 CFR 63.1350(f)(1) – (f)(3)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection L. EU012 Finish Grinding Operation- Line 2.

- L.11. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o)(1) - (5); and 40 CFR 63.8(f).  
[Rule 62-204.800(11)(b)48, F.A.C.; 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]
- L.12. O&M Plan for Baghouses.** The owner or operator shall adhere to the maintenance plan (O&M plan). The O&M plan addresses the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department’s Northeast District office prior to expiration of this permit.  
[Permit No. 0010087-031-AC; and 40 CFR 63.1347]
- L.13. LLL Operation and Maintenance Plan Requirements.**
- a. The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:
    - (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
    - (2) Corrective actions to be taken when required 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement in Specific Condition No. L.10.c.*)
  - (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.
- [40 CFR 63.1347(a)(1), (2), and (b)]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection M. EU013 Cement Load-Out Silos 6 & 7

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

| EU No. | Brief Description                                                                                                                                                                                                                                                  |
|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -013   | <b>Cement Load-Out Silos 6 &amp; 7.</b> Emissions unit 013 shall have one emission point, the stack of the loadout at silos 6 and 7, designated by the applicant as 2Q14. Particulate matter emissions from this emissions unit shall be controlled by a baghouse. |

Initial Startup Date: 10/07/1999.

*{Permitting Note: Emissions unit 013 is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants adopted by reference into Rule 62.204.800(8)(b)9, F.A.C. and 40 CFR 60 Subpart A, General Provisions. This emissions unit is also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry, adopted by reference into Rule 62.204.800(11)(b)48, F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}*

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

**M.1. NSPS Requirements – Subpart F.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart F (Standards of Performance for Portland Cement Plants).

[Rule 62-204.800(8)(b)9, F.A.C.; and NSPS Subpart F of 40 CFR 60]

**M.2. NESHAP Requirements – Subpart LLL.** This emission unit shall comply with all applicable provisions of 40 CFR 63, Subpart LLL (NESHAP from the Portland Cement Manufacturing Industry) attached to is part of this permit.

[Rule 62-204.800(11)(b)48, F.A.C.; and NESHAP Subpart LLL of 40 CFR 63]

#### EMISSION LIMITATIONS AND STANDARDS

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

**M.3. Hours of Operation.** These units may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200(PTE), F.A.C.]

**M.4. Particulate Matter (PM) Emissions.** Particulate matter emissions shall not exceed 0.01 grains/dscf. Particulate matter emissions shall be controlled by a baghouse. PM emissions for all emission points in this emission unit are limited to 0.22 lb/hr and 1.0 ton per year.

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

**M.5. PM<sub>10</sub> Emissions.** PM<sub>10</sub> emissions shall not exceed 0.007 grains/dscf. PM<sub>10</sub> emissions are limited to 0.15 lb/hr and 0.67 tons per year. The particulate weight emission standard and the visible emissions limit of 5% opacity are BACT.

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

**M.6. Visible Emissions.**

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

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

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection M. EU013 Cement Load-Out Silos 6 & 7

#### M.6. Continued:

- b. Visible emissions from each emission point of this emissions unit shall not exceed 10% opacity.

*{Permitting Note: Compliance with this emission limit of 10% opacity on an annual basis will be demonstrated by complying with the 5% opacity limit.}*

[Rules 62-204.800(11)(b)48; and 40 CFR 63.1345.]

#### CONTINUOUS COMPLIANCE REQUIREMENTS

##### M.7. (LLL) Periodic Visible Emissions - EPA Method 22 (each EP).

- a. Sources subject to a limitation on opacity under 40 CFR 63.1345 must conduct required emissions monitoring in accordance with the provisions of (i) through (vii) of **this Specific Condition** (40 CFR 63.1350(f)(1)(i) - (vii)) and in accordance with the operation and maintenance plan (40 CFR 63.1347) **Specific Condition No. M.10.** The facility must also develop an opacity emissions monitoring plan (40 CFR 63.1350(p)(1) - (4)) **Specific Condition No. M.10.**, and an approved alternate monitoring requirements 40 CFR 63.1350(o)(5), if applicable.
1. The facility must conduct a monthly 10-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7. The performance test must be conducted while the affected source is in operation.
  2. If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the facility must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  3. If no visible emissions are observed during the semi-annual test for any affected source, the facility may decrease the frequency of performance testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual performance test, the owner or operator must resume performance testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
  4. If visible emissions are observed during any Method 22 performance test, of appendix A-7, the facility must 30 minutes of opacity observations, recorded at 15-second intervals, in accordance with Method 9 of appendix A-4. The Method 9 performance test, of Appendix A-4, must begin within 1-hour of any observation of visible emissions.
  5. The requirement to conduct Method 22 visible emissions monitoring does not apply to any totally enclosed conveying system transfer point, regardless of the location of the transfer point. "Totally enclosed conveying system transfer point" must mean a conveying system transfer point that is enclosed on all sides, top, and bottom. The enclosures for these transfer points must be operated and maintained as total enclosures on a continuing basis in accordance with the facility operations and maintenance plan.
  6. If any partially enclosed or unenclosed conveying system transfer point is located in a building, the facility must conduct a Method 22 performance test, of Appendix A-7, according to the requirements of paragraphs (i) through (iv) for each such conveying system transfer point located within the building, or for the building itself, according to paragraph (vii).
  7. If visible emissions from a building are monitored, the requirements of paragraphs (i) through (iv) apply to the monitoring of the building, and the facility must also test visible emissions from each side, roof, and vent of the building for at least 10 minutes.

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection M. EU013 Cement Load-Out Silos 6 & 7

- b. Corrective actions. If visible emissions are observed during any Method 22 visible emissions test conducted under of **this Specific Condition a.**, the facility must initiate, within one-hour, the corrective actions specified in the site specific operating and maintenance plan provisions in 40 CFR 63.1347.

[Rule 62-204.800, F.A.C.; 40 CFR 63.1350(f)(1) and (f)(3); and 40 CFR 63.1350(o)(1) - (5)]

### TESTING REQUIREMENTS

**M.8. PM & PM<sub>10</sub> Compliance Testing.** Annual compliance testing for PM and PM<sub>10</sub> emissions from these emission points is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

[Rule 62-297.620(4), F.A.C.; and Permit No. 0010087-031-AC]

- a. Visible Emissions Test (Each EP). *BACT Annual VE Testing Requirements.* The test method for demonstrating compliance with the 5% 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, no less frequently than once every calendar year (January 1 – December 31)

*{Permitting Note: The annual test method is in accordance with Permit No AC01-267311/PSD-FL-228}*

[Permit No. AC01-267311/PSD-FL-228; Rules 62-297.310(5)(b) and (8)(a)1.]

**M.9. (LLL) Opacity Monitoring Plan.** Demonstrate compliance with any applicable emissions limit through performance stack testing or other emissions monitoring, the facility must develop a site-specific monitoring plan according to the requirements of 40 CFR 63.1350(p)(1) – (4). This requirement also applies to the facility if the facility petitions to the EPA Administrator for alternative monitoring parameters under 40 CFR 63.1350(o)(1) - (5) and 40 CFR 63.8(f).

[Rule 62-204.800(11)(b)48, F.A.C.; 40 CFR 63.1350(p)(1) – (4); and 40 CFR 63.1350(o)(1) - (5)]

**M.10. LLL Operation and Maintenance Plan Requirements.** The permittee shall prepare a written operations and maintenance plan. The plan must be submitted to the Compliance Authority for review and approval as part of the application for a part 70 (Title V) permit and must include the following information:

- a. Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emissions limits and operating limits. The operations and maintenance plan must address periods of startup and shutdown.
- b. Corrective actions to be taken when required by paragraph 40 CFR 63.1350(f)(3) (*See Method 22 testing requirement in **Specific Condition No. M.7.b.***)

Failure to comply with any provision of the operations and maintenance plan developed in accordance with this section is a violation of the standard.

[40 CFR 63.1347(a)(1), (2), and (b)]

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection N. EU014 Coal Handling and Grinding Operations- Line 2**

**Subsection N.** This section addresses the following emissions unit(s).

| EU No. | Brief Description                              |
|--------|------------------------------------------------|
| -014   | Coal Handling and Grinding Operations - Line 2 |

Initial Startup Date: 06/2010.

*{Permitting Note: Emissions unit 014 is subject to 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants adopted by reference by Rule 62-204.800(8)(b)33, F.A.C. and 40 CFR 60 Subpart A (General Provisions); and Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.}*

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

**OPERATIONAL REQUIREMENTS**

**N.1. NSPS Requirements – Subpart Y.** This emission unit shall comply with all applicable provisions of 40 CFR 60 Subpart Y (Standards of Performance for Coal Preparation Plants).

[Rule 62-204.800(8)(b)33, F.A.C.; and NSPS Subpart Y of 40 CFR 60]

**OPERATIONAL REQUIREMENTS**

**N.2. Hours of Operation.** This emissions unit may operate continuously, i.e., 8,760 hours per year.

[Rule 62-210.200(PTE), F.A.C.]

**N.3. Process Rate Limitation.** The coal mill shall not crush more than 15.4 tons per hour, 30-day average rate of coal and/or petroleum coke. The coal mill shall not crush more than 134,769 tons annually.

[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0010087-031-AC]

**N.4. O&M Plan for Baghouses.** The owner or operator shall adhere to the operation and maintenance plan (O&M Plan). The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Northeast District office prior to expiration of this permit.

[Permit No. 0010087-031-AC]

**EMISSION LIMITATIONS AND PERFORMANCE STANDARDS**

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

**N.5.** Emissions unit 014 shall have the following emission points:

| EMISSION POINT | DESCRIPTION         |
|----------------|---------------------|
| 2S17           | Coal mill #2        |
| 2S21           | Pulverized coal bin |

**N.6. Particulate Matter (PM) Emissions.** Particulate matter (PM) emissions from each emission point shall not exceed 0.01 grains/dscf (1.81 lbs/hr and 7.9 tpy). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE); 40 CFR 60.252 and Permit No. 0010087-031-AC]

**N.7. PM<sub>10</sub> Emissions.** PM<sub>10</sub> emissions shall not exceed 0.007 grains/dscf (1.27 lb/hr and 5.55 tpy). Particulate matter emissions from each emission point of this emissions unit shall be controlled by a baghouse.

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection N. EU014 Coal Handling and Grinding Operations- Line 2

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[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0010087-031-AC]

**N.8. Visible Emissions.**

- a. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity.
- b. Coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal shall not exceed a 20% opacity.

[Rules 62-204.800(8)(b)33, 62-210.200(PTE), 62-212.400(BACT), F.A.C.; and Permit No. 0010087-031-AC; and 40 CFR 60.254(a)(b)]

#### COMPLIANCE MONITORING AND TESTING REQUIREMENTS

**N.9. Emission Tests Required.** During each calendar year, no less frequently than once every calendar year (January 1 – December 31), the owner or operator shall demonstrate compliance with the visible emissions standard annually using EPA Method 9, as described in 40 CFR 60 Appendix A.

*40 CFR 60.257 Test methods and procedures.*

- a. The owner or operator must determine compliance with the applicable opacity standards as specified in paragraphs (a)(1) through (3) of this section.
  - (1) Method 9 of appendix A–4 of this part and the procedures in 40 CFR 60.11 must be used to determine opacity, with the exceptions specified in paragraphs (a)(1)(i) and (ii).
    - (i) The duration of the Method 9 of appendix A–4 of this part performance test shall be 1 hour (ten 6-minute averages).
    - (ii) If, during the initial 30 minutes of the observation of a Method 9 of appendix A–4 of this part performance test, all of the 6-minute average opacity readings are less than or equal to half the applicable opacity limit, then the observation period may be reduced from 1 hour to 30 minutes.
  - (2) To determine opacity for fugitive coal dust emissions sources, the additional requirements specified in paragraphs (a)(2)(i) through (iii) must be used.
    - (i) The minimum distance between the observer and the emission source shall be 5.0 meters (16 feet), and the sun shall be oriented in the 140-degree sector of the back.
    - (ii) The observer shall select a position that minimizes interference from other fugitive coal dust emissions sources and make observations such that the line of vision is approximately perpendicular to the plume and wind direction.
    - (iii) The observer shall make opacity observations at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Water vapor is not considered a visible emission.
  - (3) A visible emissions observer may conduct visible emission observations for up to three fugitive, stack, or vent emission points within a 15-second interval if the following conditions specified in paragraphs (a)(3)(i) through (iii) of this section are met.
    - (i) No more than three emissions points may be read concurrently.
    - (ii) All three emissions points must be within a 70 degree viewing sector or angle in front of the observer such that the proper sun position can be maintained for all three points.
    - (iii) If an opacity reading for any one of the three emissions points is within 5 percent opacity from the applicable standard (excluding readings of zero opacity), then the observer must stop taking readings for the other two points and continue reading just that single point.

[Rule 62-204.800(8)(b)33, F.A.C.; 40 CFR 60.257]

**N.10. PM Emissions Testing.** For emission points 2S17 and 2S21, initial and annual compliance testing for PM emissions from this emission point is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection N. EU014 Coal Handling and Grinding Operations- Line 2

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emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

Should subsequent particulate matter (PM) testing be required for either emission point of emissions unit 014, compliance shall be demonstrated using EPA Method 5.

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

#### RECORD KEEPING REQUIREMENTS

**N.11. Temperature.** A continuous monitor for temperature shall be installed, operated, and maintained at Emission Point 01 pursuant to 40 CFR 60.253(a)(1).

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

**N.12. Records of Process Rates.** The owner or operator shall make and maintain records showing the monthly processing rate of coal and petroleum coke crushed in the coal mill. Records of the processing rate for each month shall be completed no later than 10 days following the end of the month.

[Permit No. 0010087-031-AC]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection O. EU017 Emergency Engine 1150 HP

**Subsection O.:** The specific conditions in this section apply to the following emissions unit:

| EU No. | Emission Unit Description           |
|--------|-------------------------------------|
| 017    | Emergency Diesel Engine (1,150 HP). |

Commence Construction: 1/2007.

This emissions unit is a stationary compressions ignition (CI) reciprocating internal combustion engine (RICE) (4- Stroke Cycle water-cooled diesel) that has a maximum engine rating of 1,150 brake-horsepower (HP) at 100% load. The electrical generator has a nominal power rating of 858 kilowatt (kW). This emergency generator is used to provide emergency backup power for Kiln No. 2.

The following table provides important details for this engine:

| Engine Identification                 | Engine Brake HP   | Date of Construction | Model Year | Displacement liters/cylinder (l/c) | Engine Manufacturer | Serial No. |
|---------------------------------------|-------------------|----------------------|------------|------------------------------------|---------------------|------------|
| Kiln No. 2<br>Emergency Diesel Engine | 1,150<br>(858 kW) | 01/2007              | 2007       | 6.8                                | Caterpillar         | MJE00417   |

*{Permitting Note: This CI RICE is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary CI RICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. This RICE is not a fire pump. This is a “new” stationary emergency CI RICE with a displacement of less than 10 liters per cylinder, located at a major source of HAP, that has been modified, reconstructed or commenced construction (i.e., date engine was ordered) on or after 6/12/2006, and that has a post-2007 model year. In accordance with provisions of 40 CFR 63.6590(c)(6), meeting the requirements of 40 CFR 60, Subpart IIII, satisfies compliance with the requirements of Subpart ZZZZ.}*

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

**O.1. Authorized Fuel.** This Stationary RICE must use diesel fuel that meets the following requirements for non-road diesel fuel:

- Sulfur Content.** The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.
- Cetane and Aromatic.** The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[40 CFR 60.4207(b), 80.510(c), 80.510(f)(2) & 80.510(f)(7)]

**O.2. Hours of Operation.**

- Emergency Situations.** There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 60.4211(f)(1)]
- Other Situations.** The facility may operate the emergency stationary RICE for any combination of the purposes specified in **O.2.b.(1) through (3) of this Specific Condition** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by **O.2.c. of this Specific Condition** counts as part of the 100 hours per calendar year allowed by **O.2.b. of this Specific Condition**  
**(1) Maintenance and Testing.** Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year. [40 CFR 60.4211(f)(2)(i)]

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## SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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### Subsection O. EU017 Emergency Engine 1150 HP

- (2) Emergency Demand Response. Each 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 40 CFR 60.17), 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. [40 CFR 60.4211(f)(2)(ii)]
- (3) Voltage or Frequency Deviations. 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. [40 CFR 60.4211(f)(2)(iii)]
- c. Non-emergency Situations. These RICE may be operated for up to 50 hours per calendar year in nonemergency 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 paragraph b., above. 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. [40 CFR 60.4211(f)(3)]

**O.3. Operation and Maintenance.** The owner or operator must operate and maintain the stationary CI internal combustion engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer. In addition, owners and operators may only change those settings that are permitted by the manufacturer. This RICE must be maintained and operated to meet the emissions limits in **Conditions O.4.** through **O.6.** over the entire life of the engine. [40 CFR 60.4206, 4211(a)(1), (2) & (3)]

### EMISSIONS STANDARDS

- O.4. NO<sub>x</sub> + NMHC Emissions.** Emissions of NO<sub>x</sub> plus non-methane hydrocarbons shall not exceed 6.4 grams per kilowatt hour (g/kW-hr) (4.8 grams per horsepower hour (g/HP-hr)). [40 CFR 60.4205(b) & 89.112 (Table 1)]
- O.5. CO Emissions.** CO emissions shall not exceed 3.5 g/kW-hr (2.6 g/HP-hr). [40 CFR 60.4205(b) & 89.112 (Table 1)]
- O.6. PM Emissions.** PM emissions shall not exceed 0.2 g/kW-hr (0.15 g/HP-hr). [40 CFR 60.4205(b) & 89.112 (Table 1)]

### TESTING AND COMPLIANCE REQUIREMENTS

- O.7. Engine Certification Requirements.** The owner or operator must comply with the emissions standards specified above by having purchased an engine certified by the manufacturer to meet those limits. The engine must have been installed and configured according to the manufacturer's emission-related specifications, except as permitted in **Condition O.8.** [40 CFR 60.4211(c)]
- O.8. Compliance Requirements Due to Loss of Certification.** If the facility does not install, configure, operate, and maintain the engine and control device according to the manufacturer's emission-related written instructions, or the facility change emission-related settings in a way that is not permitted by the manufacturer, the facility must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the facility must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the facility change emission-related settings in a way that is not permitted by the manufacturer. The facility must conduct subsequent

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection O. EU017 Emergency Engine 1150 HP

performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]

**O.9. Testing Requirements.** In the event performance tests are required pursuant to **Condition O.8.**, the following requirements shall be met:

- a. *Testing Procedures.* The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. [Link to Subpart F](#)
- b. *NTE Standards.* Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable standard (STD) in **Conditions O.4.** through **O.6.**, determined from the following equation:  
NTE Requirement For Each Pollutant = (1.25) x (STD) (Eq. 1)  
[40 CFR 60.4212(a) & (c)]

**O.10. Common Testing Requirements.** Unless otherwise specified and if required, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.

[Rule 62-297.310, F.A.C.]

#### MONITORING REQUIREMENTS

**O.11. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 60.4209(a)]

#### RECORDS AND REPORTS

**O.12. Hours of Operation Records.** The owner or operator must keep records of the operation of the engine in emergency and non-emergency services that are recorded through the non-resettable hour meter. The owner or operator must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

**O.13. Maintenance Records.** To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed pursuant to **Condition O.8.**, the owner or operator must keep the following records:

- a. Engine manufacturer documentation and certification indicating compliance with the standards.
- b. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
- c. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.]

**O.14. Testing Notification.** At such time that the requirements of **Condition O.8.** become applicable, the owner or operator shall notify the compliance authority of the date by which the initial compliance test must be performed. [Rule 62-213.440(1)]

**O.15. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

#### GENERAL PROVISIONS

**O.16. 40 CFR 60 Subpart A, General Provisions.** The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below. [Link to 40 CFR 60, Subpart A - General Provisions.](#)

| General Provisions Citation | Subject of Citation                             |
|-----------------------------|-------------------------------------------------|
| 40 CFR 60.1                 | General applicability of the General Provisions |

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection O. EU017 Emergency Engine 1150 HP**

| <b>General Provisions Citation</b> | <b>Subject of Citation</b>                      |
|------------------------------------|-------------------------------------------------|
| 40 CFR 60.2                        | Definitions (see also 40 CFR 60.4219)           |
| 40 CFR 60.3                        | Units and abbreviations                         |
| 40 CFR 60.4                        | Address                                         |
| 40 CFR 60.5                        | Determination of construction or modification   |
| 40 CFR 60.6                        | Review of plans                                 |
| 40 CFR 60.9                        | Availability of information                     |
| 40 CFR 60.10                       | State Authority                                 |
| 40 CFR 60.12                       | Circumvention                                   |
| 40 CFR 60.14                       | Modification                                    |
| 40 CFR 60.15                       | Reconstruction                                  |
| 40 CFR 60.16                       | Priority list                                   |
| 40 CFR 60.17                       | Incorporations by reference                     |
| 40 CFR 60.19                       | General notification and reporting requirements |

[40 CFR 60.4218]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection P. EU 019-Emergency Diesel Fire Pump (83 HP).

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

| EU No. | Emission Unit Description           |
|--------|-------------------------------------|
| 019    | Emergency Diesel Fire Pump (83 HP). |

Commence Construction: 11/1998.

This emissions unit is a stationary CI RICE fire pump engine (In-Line 4-Stroke Cycle) that has a maximum engine rating of 83 brake-HP at 100% load. The fire pump has a nominal power rating of 62 kilowatt (kW). This is centrifugal-type fire pump engine.

The following table provides important details for the engines collectively regulated as EU 019:

| Engine Identification | Engine Brake HP | Date of Construction | Model Year | Displacement liters/cylinder (l/c) | Engine Manufacturer | Serial No.     |
|-----------------------|-----------------|----------------------|------------|------------------------------------|---------------------|----------------|
| Fire Pump Engine      | 83 (62 kW)      | 11/1998              | 1998       | 1.4                                | Clark Detroit       | VMPP04H T3431H |

*{Permitting Note: This CI RICE is regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. This RICE is exempted from regulations under 40 CFR 60, Subpart IIII - New Source Performance for Stationary ICE based on the manufacturer date. This is an “existing” emergency stationary CI RICE fire pump engine with less than or equal to 500 HP, with a displacement of less than 10 liters per cylinder that are located at a major source of HAP and that the date the engine was ordered (i.e. date of construction) was before 6/12/2006 and has not been modified or reconstructed after 6/12/2006.}*

#### ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

##### P.1. Hours of Operation.

- Emergency Situations. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- Maintenance and Testing. Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. 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 year. [40 CFR 63.6640(f)(2)(i)]
- Non-emergency Situations. These RICE may be operated for up to 50 hours per calendar year in nonemergency 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 paragraph b., above. 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. [40 CFR 63.6640(f)(3)]

##### P.2. Work or Management Practice Standards.

- Oil. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 & Table 2c.1.a.]
- Air Cleaner. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6602 & Table 2c.1.b.]
- Hoses and Belts. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6602 & Table 2c.1.c.]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### Subsection P. EU 019-Emergency Diesel Fire Pump (83 HP).

- d. Operation and Maintenance. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow the facility's maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]
- e. Engine Startup. During periods of startup the owner or operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]
- f. Oil Analysis. The owner or operator has the option of using an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 CFR 63.6625(i)]

#### MONITORING OF OPERATIONS

- P.3. Hour Meter.** The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

#### COMPLIANCE

- P.4. Continuous Compliance.** Each unit shall be in compliance with operating standards in this section at all times.

[40 CFR 63.6605(a)]

- P.5. Operation and Maintenance of Equipment.** At all times the owner or operator must operate and maintain, any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the compliance authority which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR 63.6605(b)]

#### RECORDKEEPING REQUIREMENTS

- P.6. Notification, Performance and Compliance Records.** The owner or operator must keep:
- a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted.
  - b. Records of the occurrence and duration of each malfunction of operation.
  - c. Records of all required maintenance performed on the hour meter.

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection P. EU 019-Emergency Diesel Fire Pump (83 HP).

- d. Records of actions taken during periods of malfunction to minimize emissions in accordance with **Condition P.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
- e. Records of the actions required in **Condition P.2.d.** to show continuous compliance with each emission limitation or operating requirement.
- f. Records of the Work or Management Practice Standards specified in **Condition P.2.**
- g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to the facility own maintenance plan.
- h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes.

[40 CFR 63.6655]

#### **P.7. Record Retention**

- a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

### **REPORTING REQUIREMENTS**

- P.8. Delay of Performing Work Practice Requirements.** If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in **Condition P.2.**, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

#### **General Provisions**

- P.9. 40 CFR 63 Subpart A - General Provisions.** The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A - General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. [Link to 40 CFR 63, Subpart A - General Provisions.](#)

#### **P.9. Continued:**

| General Provisions Citation | Subject of Citation                                      |
|-----------------------------|----------------------------------------------------------|
| 40 CFR 63.1                 | General applicability of the General Provisions          |
| 40 CFR 63.2                 | Definitions (additional terms defined in 43 CFR 63.6675) |
| 40 CFR 63.3                 | Units and abbreviations                                  |
| 40 CFR 63.4                 | Prohibited activities and circumvention                  |
| 40 CFR 63.5                 | Construction and reconstruction                          |
| 40 CFR 63.6(a)              | Applicability                                            |

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**SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.**

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**Subsection P. EU 019-Emergency Diesel Fire Pump (83 HP).**

| <b>General Provisions Citation</b> | <b>Subject of Citation</b>                                        |
|------------------------------------|-------------------------------------------------------------------|
| 40 CFR 63.9(a)                     | Applicability and State delegation of notification requirements   |
| 40 CFR 63.9(b)(1)–(5)              | Initial notifications (except that 40 CFR 63.9(b)(3) is reserved) |
| 40 CFR 63.9(i)                     | Adjustment of submittal deadlines                                 |
| 40 CFR 63.9(j)                     | Change in previous information                                    |
| 40 CFR 63.10(a)                    | Administrative provisions for recordkeeping/reporting             |
| 40 CFR 63.10(b)(1)                 | Record retention                                                  |
| 40 CFR 63.10(b)(2)(vi)–(xi)        | Records                                                           |
| 40 CFR 63.10(b)(2)(xii)            | Record when under waiver                                          |
| 40 CFR 63.10(b)(2)(xiv)            | Records of supporting documentation                               |
| 40 CFR 63.10(b)(3)                 | Records of applicability determination                            |
| 40 CFR 63.10(d)(1)                 | General reporting requirements                                    |
| 40 CFR 63.10(f)                    | Waiver for recordkeeping/reporting                                |
| 40 CFR 63.12                       | State authority and delegations                                   |
| 40 CFR 63.13                       | Addresses                                                         |
| 40 CFR 63.14                       | Incorporation by reference                                        |
| 40 CFR 63.15                       | Availability of information                                       |

[40 CFR 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

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

| EU No. | Emission Unit Description                                                     |
|--------|-------------------------------------------------------------------------------|
| 020    | Grinding and Screening Operations for Alternative Solid Fuels (Re-processing) |

This emissions unit consists of mechanical and pneumatic feed systems for alternative fuels, unenclosed conveyors and transfer points from processing to alternative fuel injection point.

#### Equipment

**Q.1. Equipment.** The permittee is authorized to operate the following permanent equipment for firing alternative solid fuels (ASF) in In-Line Kiln/Raw Mill System - Lines 1 and 2.

- a. *Mechanical and Pneumatic Precalciner Handling and Feed Systems.* Each feed system shall be designed to handle solid fuels with multiple points of injection to accommodate ASF particle size, density and heating value. The nominal feed rate of each feed system is 15 tons of ASF per hour.

(1) The mechanical feed system consists of screw and chain conveyors, distribution bins, weigh-belt feeders, vent filters, and bin-weighing equipment.

(2) The pneumatic feed system consists of a system of rotary valves, blowers, and ductwork.

To the extent practicable, components of the precalciner feed systems shall be substantially enclosed or covered to prevent the loss of and fugitive dust emissions. Each feed system shall be integrated into the existing kiln data system to provide real time data on the ASF feed rates to the kiln systems operators. The ASF feed rate shall be recorded along with the other fuel feed rates. *{Permitting Note: For reference, the maximum design heat input rates of each precalciner burner in Kilns 1 and 2 are 364 million British thermal units per hour (MMBtu/hour) and 400 MMBtu/hour, respectively.}*

- b. *Main Kiln Burner Systems.* The permittee is authorized to replace the main kiln burner system in Kiln Nos. 1 and 2 with a multi-fuel burner and related feed equipment specifically designed for co-firing ASF with coal and other authorized fuels. The permittee shall submit details of the final main kiln burner design for each kiln once they are complete (fuel types, design heat input rates and schematics). *{Permitting Note: Kiln No. 2 main burner was replaced on October 29, 2020 and began service on November 3, 2020. The permittee has not replaced the main kiln burner for Kiln 1. Since Permit No. 0010087-051-AC, which authorized the replacement of both kiln burners, expired before the main kiln burner for Kiln 1 was replaced, the permittee shall apply for an Air Construction permit to be re-authorized to replace the main kiln burner for Kiln 1.}*

- c. *Grinding and Sizing Equipment.* The permittee is authorized to install grinding, shredding, screening and sizing equipment to re-process the ASF on site if necessary. The processing equipment shall be located in the raw material storage building. This equipment will be powered by electric motors or diesel engines. In addition, the diesel engines shall comply with any applicable NSPS or NESHAP.

[Permit No. 0010087-051-AC]

#### Authorized Fuels

**Q.2. ASF.** Subject to the ASF Acceptance Criteria given in **Specific Condition Q.3** of this subsection, the permittee is authorized to co-fire authorized fuels with any of the following ASF.

- a. *Plastics*, which includes materials such as polyethylene plastic used in agricultural and silvicultural operations. This may include incidental amounts of chlorinated plastics.
- b. *Tire-Derived Fuel (TDF)*, which includes whole and shredded tires with or without steel belt material, including portions of tires as tire fluff.

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

- c. *Roofing Material*, which consists of roofing shingles and related roofing materials when the bulk of the incombustible grit material has been separated and when the material is not subject to regulations as an asbestos containing material pursuant to NESHAP Subpart M of 40 CFR 61.
- d. *Cellulosic Biomass - Untreated*, which includes materials such as clean untreated lumber, tree stumps, tree limbs, slash, bark, sawdust, sander dust, wood chips scraps, wood scraps, wood slabs, wood millings, wood shavings and processed pellets made from wood or other forest residues.
- e. *Cellulosic Biomass - Treated*, which includes materials such as preservative-treated wood that may contain treatments such as creosote, copper-chromium-arsenic (CCA), or ammoniacal copper quaternary (AQC), painted wood, or resinated woods (plywood, particle board, medium density fiberboard, oriented strand board, laminated beams, finger-jointed trim and other sheet goods). The permittee shall not fire more than 1,000 lb/hour averaged on a 7-day block average basis of segregated streams of wood treated with copper-chromium-arsenic (CCA) compounds. *{Permitting Note: To the extent practicable, operators plan to introduce CCA-treated wood at low rates and co-fire with other ASF. The majority of copper, chromium and arsenic compounds are expected to be integrated into the cement clinker product.}*
- f. *Agricultural Biogenic Materials*, which includes materials such as peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts, animal bedding and other similar types of materials with a suitable heating value.
- g. *Carpet-Derived Fuel*, which includes shredded new, reject or used carpet with incidental related materials (e.g., tack-down strips, nails, etc.).
- h. *Engineered Fuel*, which are engineered to have targeted, consistent fuel properties such as: calorific value, moisture, particle size, ash content, and volatility. The specific targeted properties are established based on available alternative fuel material supply and are carefully controlled through blending of non-hazardous combustible materials or through separation of non-hazardous combustible materials from combustible materials (mixes of any alternative fuels where the blending and processing may also include the addition of on-specification and off-specification used oils or other non-hazardous liquids to ensure consistent and predictable fuel properties). a composition of carefully blended ASF and other non-hazardous byproducts and materials specifically designed for use as a fuel.
- i. *Petroleum Byproducts*, which includes used oil (on-specification and off-specification) as regulated pursuant to 40 CFR 279. In addition, this category includes coal tar sludge and carbon black residue (commonly known as charcoal).
- j. *ASF Mix*, which includes a blend of any of the above mixed at the plant.

[Permit No. 0010087-051-AC and Rule 62-210.200(PTE), F.A.C.]

**Q.3. ASF Acceptance Criteria.** The permittee shall only accept and fire ASF that meets the following criteria.

- a. *Prohibited Materials:* The permittee is prohibited from firing the following materials in Kilns 1 and 2: hazardous waste, nuclear waste and radioactive waste. The permittee shall not knowingly fire biomedical waste, asbestos-containing waste, whole batteries, explosive materials and unsorted municipal garbage. These prohibited materials shall not be used to manufacture engineered fuels.

If the permittee identifies delivered material that falls under **Specific Condition Q.3a.**, the supplier shall be contacted and the material shall be returned, disposed, or any other appropriate legal method of handling the material shall be employed. The permittee shall maintain records of delivery, sampling and analysis, and actions taken to correct abnormalities. Such records shall be stored onsite for at least five years and available for inspection upon request.

- b. *Acceptance Criteria:* To be accepted as an authorized fuel, ASF delivered to the site shall have a lower heating value greater than 3500 Btu/lb. If a shipment does not meet the Acceptance Criteria, the permittee shall reject the shipment. The Acceptance Criteria is based on the analytical results of the ASF supplier or by the permittee. *{Permitting Note: For internal plant needs, the permittee may establish*

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

*other acceptance criteria such as particle sizing.*

[Permit No. 0010087-051-AC]

*{Permitting Note: **Specific Condition Q.3.b.** is only applicable when the kilns are regulated under 40 CFR 63 Subpart LLL.}*

- Q.4. ASF Target Levels.** Targets levels are the desired ASF properties for as fired fuel in the system. Target Levels are not enforceable and do not apply to individual raw materials or fuels.

| Parameter <sup>1</sup>                                                                                                                                               | Target Levels <sup>2</sup> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| Higher Heating Value                                                                                                                                                 | > 5,000 Btu/lb             |
| Arsenic                                                                                                                                                              | < 2,200 ppm by weight      |
| Cadmium                                                                                                                                                              | < 160 ppm by weight        |
| Chromium                                                                                                                                                             | < 200 ppm by weight        |
| Lead                                                                                                                                                                 | < 1,900 ppm by weight      |
| Mercury                                                                                                                                                              | < 0.3 ppm by weight        |
| Chlorine                                                                                                                                                             | < 0.88% by weight          |
| Sulfur                                                                                                                                                               | < 3.1% by weight           |
| Notes:<br>1. Heating value is on dry basis. Concentrations values are on wet basis.<br>2. Target levels are on United States Geological Survey data of coal samples. |                            |

[Permit No. 0010087-051-AC]

*{Permitting Note: Kiln operators will review operations and make potential adjustments, as necessary, to accommodate ASF used in the kiln. The kiln operators will help ensure production of high-quality cement clinker. This Condition is only applicable when the kilns are regulated under 40 CFR 63 Subpart LLL.}*

- Q.5. Receiving ASF.** For ASF received at the plant, the permittee shall comply with the following requirements.
- The permittee shall reject any shipment that does not meet the Acceptance Criteria.
  - All ASF received at the plant shall be in covered trucks and/or enclosed containers. When unloading and handling ASF, the permittee shall take reasonable precautions to prevent fugitive dust emissions. The permittee shall also visually check the delivered ASF for particle size and components.
  - The permittee shall record the amount and type of each ASF received.
  - Fuel Analyses Parameters: The following information shall be included when reporting the analytical results for an ASF: lower heating value (Btu/lb) of ASF; moisture, ash, volatiles, fixed carbon, sulfur and chlorine content (percent by weight); and chromium, lead and mercury contents (ppmw). All concentrations are on a dry basis. Reject roofing shingles shall include a certification from the manufacturer to be made without asbestos. Prior to accepting used roofing shingles, results from a laboratory that has tested for asbestos containing material needs to be provided showing the used roofing shingles does not contain 1% or more of asbestos and is not a regulated material in accordance with NESHAP Subpart M of 40 CFR 61.
  - Sampling/Analysis Frequency:
    - Tire-Derived Fuel:* No sampling/analysis is required since the typical analytical results for this manufactured product are well known.
    - Plastics, Roofing Materials, Agricultural Biogenic Materials, and Carpet-Derived Fuel:* The permittee shall obtain the analytical results for a representative sample of ASF collected during each

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

ASF assessment. In addition, the permittee shall obtain the analytical results for one representative sample of ASF during each subsequent calendar year that an ASF is fired.

- (3) *Cellulosic Biomass - Untreated, Cellulosic Biomass – Treated, Petroleum Byproducts, and Engineered Fuel*: The permittee shall obtain the analytical results for two representative samples of ASF collected during each ASF assessment (at least 15 days apart). For every subsequent 10,000 tons of each ASF received on site, the permittee shall obtain the analytical results for a representative sample of the ASF.
- (4) *ASF Mix*: No sampling/analysis is required since analytical results will be available for the individual ASF.

[Permit No. 0010087-051-AC; and Rule 62-296.320, F.A.C.]

*{Permitting Note: This condition is only applicable when the kilns are regulated under 40 CFR 63 Subpart LLL.}*

**Q.6. Storing and Handling ASF.** The ASF shall be stored:

- Under cover or in covered trailers or containers;
- On top of a paved or compacted clay surface;
- Separately from other ASF unless purposely being mixed for firing;
- To promote containment and prevent contamination of air, water and soil; and
- Storage design should be appropriate to maintain the quality of the materials (e.g., first in, first out).

[Permit No. 0010087-051-AC; and Rule 62-296.320, F.A.C.]

**Q.7. Sampling/Analysis by Permittee.** For each ASF assessment, the permittee shall obtain analytical results of the ASF as required in **Specific Condition Q.5**. [Permit No. 0010087-051-AC]

#### **Emissions Standards**

**Q.8. Visible Emissions.** As determined by stack test, the ASF dust collectors/filter systems identified in **Specific Conditions Q.10** and **Q.11** shall not exceed 10% opacity. [Permit No. 0010087-051-AC]

#### **Equipment Shakedown and ASF Assessments**

**Q.9. Shakedown of Equipment and ASF Assessments.** The permittee shall comply with the emissions standards and terms of all valid air permits for Kilns 1 and 2 during shakedown of equipment identified in **Specific Condition Q.1** and ASF assessments. Each kiln system shall meet the following during shakedown of the equipment and ASF assessments:

- Burner System Shakedown with Fossil Fuel*: After replacing the main kiln burner and related injection equipment, the permittee is authorized 90 operational days for shakedown of this new equipment to ensure proper installation and operation when firing ASF.
- ASF Assessments*: For each category of ASF, the permittee is authorized 60 operational days to introduce a new ASF into the main kiln burner system or precalciner/calculator to develop good operating practices for steady kiln system operation.

The Division of Air Resource Management may approve a written request by the permittee for an additional shakedown and assessment periods due to specific extenuating circumstances.

[Permit No. 0010087-051-AC]

*{Permitting Note: This condition is only applicable when the kilns are regulated under 40 CFR 63 Subpart LLL.}*

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

##### Control Equipment

**Q.10. Kiln System Line-1 Dust Collectors/Filters.** The permittee is authorized to operate two dust collector/filter systems with a design flow rate of 450 dry standard cubic feet per minute (dscfm) each (Schenck Process, Model Nos. 54AVS25 Filter 1.13 and 1.13B, and SB10 FAN – 1.13A and 1.13C, or equivalent to) meeting the following specifications:

- a. Air-to-cloth ratio of 2.8 cubic meter per meter squared-minutes ( $\text{m}^3/\text{m}^2 \times \text{min}$ ).
- b. Nylon filter bags (or equivalent) will be used in the dust collector.
- c. PM/PM<sub>10</sub> emission factor of 0.01 grains per dry standard cubic feet (gr/dscf).

[Permit No. 0010087-064-AC]

**Q.11. Kiln System Line-2 Dust Collector/Filter.** The permittee is authorized to operate a dust collector/filter system with a design flow rate of 600 dscfm (Schenck Process, Model Nos. 54AVS36 Filter 1.06, and SB12 FAN – 1.06A, or equivalent to) meeting the following specifications:

- a. Design flow rate of 600 dscfm.
- b. Air-to-cloth ratio of  $2.5 \text{ m}^3/\text{m}^2 \times \text{min}$ .
- c. Nylon filter bags (or equivalent) will be used in the dust collector.
- d. PM/PM<sub>10</sub> emission factor of 0.01 gr/dscf.

[Permit No. 0010087-064-AC]

##### Performance Requirements

**Q.12. Operation.** Alternative solid fuels shall only be fired once the kiln has achieved steady operation, temperatures and production (i.e., when raw materials are introduced).

- a. Depending on the ASF to be fired, the operator shall carefully select the appropriate ASF feed system and feed location according to the nature of the ASF to promote efficient combustion and reduce emissions impacts. Key ASF parameters include the particle size, heating value, moisture content, chlorine content and ash content.
- b. ASF shall be introduced only in the high-temperature combustion zones of the main kiln burners, the precalciner burners or appropriate secondary firing points in the precalciners. *{Permitting Note: As a matter of practical operations, the kiln operators will gradually introduce ASF to provide steady kiln operations and minimize emissions. Once the desired ASF fuel feed rate is achieved, the operator will maintain a constant feed rate to promote efficient combustion, minimize emissions and steady-state operation. Indicators of complete combustion include flue gas oxygen content, CO levels and THC levels. As necessary, operators will review the ASF characteristics for possible adjustments to promote steady operation (e.g., account for increased flue gas volume and velocity from elevated moisture content, high chlorine and/or sulfur contents that may cause buildups, etc.).}*
- c. Operators shall discontinue firing ASF if:
  - (1) One of the CEMS, CPMS or other continuous monitors indicates a non-compliance issue;
  - (2) One of the CEMS, CPMS or other continuous monitors is down for more than two consecutive hours;or
  - (3) The operator is made aware that the kilns are producing off-specification clinker due to ASF. The firing of that ASF may resume once the issue is addressed and corrective action taken.

[Permit No. 0010087-076-AC]

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

#### Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)

##### Testing requirements

**Q.13. Analytical Methods.** The permittee shall use the following analytical methods to determine the composition of the ASF.

| Parameter                                    | Analytical Methods                                                                                                                                                                                                        |
|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Moisture, Volatiles, Ash and Fixed Carbon    | Proximate Analysis appropriate for given fuel                                                                                                                                                                             |
| Carbon, Hydrogen, Nitrogen Sulfur and Oxygen | Ultimate Analysis appropriate for given fuel                                                                                                                                                                              |
| Heating Value                                | ASTM E711 - 87(2004) Standard Test Method for Gross Calorific Value of Refuse-Derived Fuel by the Bomb Calorimeter, or<br>ASTM D5468 - 02(2007) Standard Test Method for Gross Calorific and Ash Value of Waste Materials |
| Chlorine                                     | EPA SW-846 or EPA Method 9056                                                                                                                                                                                             |
| Mercury                                      | EPA 7470A/7471A                                                                                                                                                                                                           |
| Chromium and Lead                            | EPA SW-846 or EPA Method 6010B                                                                                                                                                                                            |

Other equivalent methods may be used with prior written approval of the Division of Air Resource Management. [Permit No. 0010087-051-AC]

**Q.14. Test Methods.** When 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.; Appendix A of 40 CFR 60; and Permit No. 0010087-064-AC]

**Q.15. Annual Compliance Tests Required.** During each calendar year (January 1<sup>st</sup> to December 31<sup>st</sup>), the dust collectors/filters identified in **Specific Conditions Q.10** and **Q.11** shall be tested to demonstrate compliance with the emissions standards for VE. [Rule 62-297.310(8), F.A.C.]

**Q.16. Common Testing Requirements.** Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

*{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to <http://www.fldepportal.com/go/home> and sign in (or register if you're a new user) from the link in the upper right corner of the page. On the Welcome page select the Submit option, then select Registration/Notification, and then click on Air Compliance Test Notifications. Once in the process, just carefully read the instructions on each screen (and under the Help tabs) to complete the notification.}*

##### Recordkeeping and Reporting Requirements

**Q.17. ASF Assessment Notifications.** At least five days prior to firing each new type of ASF material listed in **Specific Condition Q.2** in Kiln Nos. 1 and 2, the permittee shall notify the Compliance Authority with a proposed schedule. The Compliance Authority may waive this deadline. [Permit No. 0010087-051-AC]

**Q.18. Records of Fuels and Heat Input.** The permittee shall record the fuel firing rate continuously on each kiln. The permittee shall maintain records of the quantity and representative analysis of fuels purchased, and

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### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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#### **Subsection Q. EU 020- Grinding and Screening Operations for Alternative Solid Fuels (Re-processing)**

such records shall include the parameters listed in **Specific Condition Q.5d**. The permittee shall make and maintain records of heat input to each pyroprocessing system on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel-firing rate by the heating value representative of that fuel from the records of fuel analysis. Such records shall be completed for each block-hour, within 15 minutes of the end of each block-hour. [Permit No. 0010087-051-AC]

- Q.19. Reports for Shakedown and ASF Assessments.** During periods of authorized shakedowns and ASF assessments for Kiln Nos. 1 and 2, the permittee shall document the shakedown and/or ASF assessment period. These periods may end early when the operator is confident that good operating practices have been defined for the ASF that result in steady kiln system operation. Within 45 days of completing a shakedown and/or assessment of each ASF material listed in **Specific Condition Q.1** for each kiln, the permittee shall provide a written report summarizing the following information collected from the shakedown and/or ASF assessment period.
- For a 24-hour period representing good operating practices and steady kiln operation, report on each kiln: the representative analysis of the ASF fired; hourly ASF and fossil fuel firing rates; hourly clinker production; hourly NO<sub>x</sub>, SO<sub>2</sub> and THC emissions data from the CEMS on Kiln No. 1 and hourly CO, NO<sub>x</sub>, SO<sub>2</sub> and VOC emissions data from the CEMS on Kiln No. 2; the 6-minute block averages from the CEMS; and the inlet temperature to main kiln ESP (3-hour average). Identify the good operating practices resulting in steady kiln operation.
  - The ASF assessments may occur over several years. Emissions from the initial ASF assessment of a new fuel may be excluded from the report requiring a comparison of actual-to-baseline emissions (Rules 62-212.300(1)(e) and 62-210.370, F.A.C.) since operators are still establishing good operating practices and the ASF will not have been available for the full calendar year. To exclude emissions data collected during an authorized shakedown and/or ASF assessment period from this report, the permittee shall submit the following information for: total clinker production; fossil fuel fired; ASF fired; total CO, NO<sub>x</sub>, SO<sub>2</sub> and VOC/THC emissions (tons). Excluded data shall be replaced with data estimated from: the actual clinker production rate; and an emissions factor based on the average emission rates from the rest of the year (i.e., all periods except the shakedown and/or ASF assessment periods).

[Permit No. 0010087-051-AC; and Rules 62-210.370 & 62-212.300, F.A.C.]

- Q.20. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

- Q.21. Actual Emissions Reporting for Permit No. 0010087-051-AC.** Permit No. 0010087-051-AC was based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.

- The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., as provided in Appendix C of Permit No. 0010087-051-AC.
- The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
  - The name, address and telephone number of the owner or operator of the major stationary source;
  - The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are

### SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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provided in Appendix C of permit No. 0010087-051-AC;

(3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and

(4) Any other information that the owner or operator wishes to include in the report.

c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the permit requires the annual reporting of actual emissions on Kiln Nos. 1 and 2 for the following pollutants: carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), particulate matter (PM), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), and mercury (Hg).

The affected emissions units are: In-Line Kiln/Raw Mill System – Line 1 (EU 003), In-Line Kiln/Raw Mill System – Line 2 (EU 010), the mechanical feed systems, the pneumatic feed systems, associated grinding and screening operations (EU 020), fugitives and combustion byproducts from related engines) and fugitive dust associated with additional truck traffic as well as the unloading, loading and handling of the alternative solid fuels.

Once construction is finished on a fuel feed system or a main kiln burner on each kiln, the first report is due within 60 days of completing the first full year of operation with the equipment in place. Note that if installation of the equipment is staggered to multiple years then, correspondingly, more than five reports for each kiln may be required.

As specified in **Specific Condition Q.20**, the CO, NO<sub>x</sub> and VOC/THC emissions data collected during the authorized shakedown/ASF assessment periods may be excluded from the comparison of actual to baseline emissions. Excluded data for each kiln shall be replaced with data estimated from: the actual clinker production rate; and an emissions factor based on the average emission rates from the rest of the year (i.e., all periods except the shakedown and/or assessment periods). The permittee shall report all of the original information as actual emissions, but may deduct emissions data collected during the equipment shakedown and assessment periods while developing good operating practices.

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