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**Regulatory and Economic Resources**  
Environmental Resources Management  
701 NW 1st Court • 2nd Floor  
Miami, Florida 33136-3912  
T 305-372-6925 F 305-372-6954

March 29, 2013

**CERTIFIED MAIL NO. 7006 0810 0000 7059 9123**  
**RETURN RECEIPT REQUESTED**

Mr. Kevin Baird  
Vice President Cement & Aggregates Operations  
Tarmac America, LLC.  
11000 NW 121 Way  
Medley, FL 33178

Subject: Request for Extension of Time on Air Permit No. 0250020-029-AC for the Tarmac America, LLC. – Pennsuco Complex facility located at 11000 NW 121 Way, in Medley, Florida.  
[Reference FDEP ID No. 0250020]

Dear Mr. Baird:

The Miami-Dade County Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management, Air Quality Management received the above-referenced correspondence, dated March 13, 2013, requesting an extension of the expiration date on Air Permit No. 0250020-029-AC on March 19, 2013. The Department staff has reviewed the request, and the RER hereby extends the expiration date for said permit from May 24, 2013 to May 24, 2015 to allow for completion of the construction.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

This permitting decision is issued pursuant to Chapter 24, Code of Miami-Dade County and Chapter 403, Florida Statutes (F.S.). The Florida Department of Environmental Protection (the Department) has permitting jurisdiction under Section 403.087, F.S. However, in accordance with Section 403.182, F.S., the Department recognizes RER as the approved local air pollution control program of Miami-Dade County. Through a Specific Operating Agreement, the Department delegated to the RER the authority to issue or deny permits and make permitting decisions for this type of air pollution source located in Miami-Dade County.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the RER Air Quality Management, 701 NW 1 Court, Miami, Florida, 33136.

Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of permitting action. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first.

Under Section 120.60(3), F.S., however, any person who asked the RER for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the RER's action is based must contain the following information:

- (a) The name and address of the RER, and the RER's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the RER's determination;
- (c) A statement of when and how the petitioner received notice of the RER's decision;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the RER's proposed action;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the RER's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes;
- (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the RER to take with respect to the RER's proposed action.

A petition that does not dispute the material facts upon which the RER's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that RER's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the RER on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the FDEP for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The FDEP will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the Clerk of the RER unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the RER.

Any party to this permitting decision (order) has the right to seek judicial review of it under section 120.68, F.S., by filing a Notice of Appeal under Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this order is filed with the clerk of the Department.

Executed in Miami-Dade County, Florida.

Permit Number: 0250020-029-AC  
Issue Date: May 25, 2011  
New Expiration Date: May 24, 2015

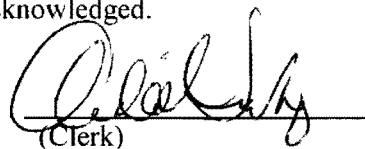
REGULATORY & ECONOMIC RESOURCES

 3/29/13  
H. Patrick Wong, Chief Date  
Air Quality Management

HPW/tr

Mr. Kevin Baird, Vice President Cement & Aggregates Operations, Tarmac America, LLC. [kbaird@titanamerica.com]  
Mr. Muhammad Khan, Environmental Engineer, Tarmac America, LLC. [mkhan@titanamerica.com]  
Mr. Max Lee, Ph.D, P.E., Koogler and Associates, Inc., 4014 NW 13 Street, Gainesville, FL 32609 [Mlee@kooglerassociates.com]  
Mr. Syed Arif, P.E., Florida Department of Environmental Protection, Minerals & Metals Permitting Group Administrator [Syed.Arif@dep.state.fl.us]  
Ms. Linda Brien, Florida Department of Environmental Protection, Southeast District Office [Linda.Brien@dep.state.fl.us]  
Ms. Ana Oquendo, EPA Region 4: Oquendo.Ana@epa.gov  
Ms. Natasha Hazziez, U.S. EPA Region 4: Hazziez.Natasha@epa.gov  
Ms. Barbara Friday, DEP BAR [barbara.friday@dep.state.fl.us] (for posting with Region 4, U.S. EPA)

**FILING AND ACKNOWLEDGMENT:** on this date, pursuant to §120.52, Florida Statutes, with the RER Air Quality Management, receipt of which is hereby acknowledged.

 3/29/13  
(Clerk) (Date)



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March 29, 2013

**CERTIFIED MAIL: 7006 0810 0000 7059 9123**  
**RETURN RECEIPT REQUESTED**

**PERMITTEE**

Tarmac America, LLC.  
11000 NW 121 Way  
Medley, FL 33178

Air Permit No. 0250020-029-AC  
Permit Expires: May 24, 2015

Authorized Representative:  
Mr. Kevin Baird, Vice President Cement & Aggregates Operations

Tarmac America, LLC.  
Minor Source Air Construction Permit  
Permanent/Trial Whole Tire Burn &  
Automatic Feeding System

This is the final air construction permit No. 0250020-029-AC, which authorizes the burning of whole tires as a supplemental fuel in the Cement Kiln System (EU 028) on a permanent basis, installation of an automatic tire feeding system, and a whole tire trial burn. The proposed work will be conducted at the Tarmac America, LLC. facility which engages in the production of aggregate, cement, concrete blocks, and ready mix concrete (Standard Industrial Classification Nos. 3241, 3271, and 3273). The facility is located in Miami-Dade County at 11000 NW 121 Way, Medley, Florida 33178. The UTM coordinates are Zone 17, 562.8 km East, and 2861.7 km North.

This final permit is organized by the following sections.

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

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

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

**AIR CONSTRUCTION PERMIT**

The notice must be filed within 30 days after this order is filed with the clerk of the Miami-Dade County Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management, Air Quality Management.

Executed in Miami-Dade County, Florida

  
\_\_\_\_\_  
H. Patrick Wong, Chief  
Air Quality Management

3/29/13  
(Date)

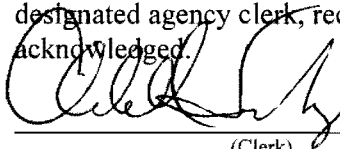
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by Certified U.S. mail and/or electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 3/29/13 to the persons listed below.

- Mr. Kevin Baird, Vice President Cement & Aggregates Operations, Tarmac America, LLC. [kbaird@titanamerica.com]
- Mr. Muhammad Khan, Environmental Engineer, Tarmac America, LLC. [mkhan@titanamerica.com]
- Mr. Max Lee, Ph.D, P.E., Koogler and Associates, Inc., 4014 NW 13 Street, Gainesville, FL 32609 [Mlee@kooglerassociates.com]
- Mr. Syed Arif, P.E., Florida Department of Environmental Protection, Minerals & Metals Permitting Group Administrator [Syed.Arif@dep.state.fl.us]
- Ms. Linda Brien, Florida Department of Environmental Protection, Southeast District Office [Linda.Brien@dep.state.fl.us]
- Ms. Ana Oquendo, EPA Region 4: Oquendo.Ana@epa.gov
- Ms. Natasha Hazziez, U.S. EPA Region 4: Hazziez.Natasha@epa.gov
- Ms. Barbara Friday, DEP BAR [barbara.friday@dep.state.fl.us] (for posting with Region 4 , U.S. EPA)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
(Clerk)

3/29/13  
(Date)

## SECTION 1. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

#### Existing Facility

Tarmac America, LLC. engages in the production of aggregate, cement, concrete blocks, and ready-mix concrete. The existing facility consists of the following emissions units.

Facility ID No. 0250020	
ID No.	Emission Unit Description
010	Finish Mill System: Finish Mill No. 1
011	Finish Mill System: Finish Mill No. 2
012	Finish Mill System: Finish Mill No. 3
013	Finish Mill System: Finish Mill No. 4
030	Finish Mill System: Finish Mill No. 6
014	Cement Handling System: Cement Storage Silos 1 through 12
015	Cement Handling System: Cement Distribution, Rail and Truck Loadout
016	Cement Handling System: Cement Packhouse
022	Nonmetallic Mineral Processing Plant Equipment and Operations at Aggregate Plant Subject to 40 CFR 60, Subpart OOO
023	Nonmetallic Mineral Processing Plant Equipment and Operations at Aggregate Plant NOT Subject to 40 CFR 60, Subpart OOO
024	Concrete Block Plant
025	Two Concrete Batch Ready Mix Plants
026	Coal Handling System
027	Clinker Handling and Storage System
028	Pyroprocessing/Raw Mill System
029	Raw Material Handling System
031	Unregulated Emissions Units and/or Activities: Fugitive Emissions
032	Cementious Sack Loadout System
033	Mobile Cementious Materials Sack Loadout System
034	Transloading of Cementious Material
035	Clinker Loadout on Finish Mill No. 4
036	Emergency Diesel Fuel Fired Air Compressor

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**SECTION 1. GENERAL INFORMATION**

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**Proposed Project**

1. Burning of whole tires as a supplemental fuel in the Cement Kiln on a permanent basis.
2. Installation of an automatic tire feeding system.
3. A whole tire trial burn.

This project will modify the following emissions unit.

<b>Facility ID No. 0250020</b>	
<b>ID No.</b>	<b>Emission Unit Description</b>
028	Pyroprocessing/Raw Mill System

**FACILITY REGULATORY CLASSIFICATION**

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.



### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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1. Permitting Authority: The permitting authority for this project is the Miami-Dade County Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management, Air Quality Management. The RER's mailing address is: 701 NW 1 Court, Suite 400, Miami, Florida 33136. The RER's telephone number is 305/372-6925.  
All documents related to applications for permits to operate an emissions unit shall be submitted to the RER Air Quality Management.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the RER, Air Quality Management. The mailing address of the RER, Air Quality Management is: 701 NW 1 Court, Suite 400, Miami, Florida 33136. The RER's telephone number is 305/372-6925.
3. Appendices: The following Appendices are attached as part of this permit:
  - a. Appendix A. Citation Formats and Glossary of Common Terms;
  - b. Appendix B. General Conditions;
  - c. Appendix C. Common Conditions;
  - d. Appendix D. Common Testing Requirements. (if applicable)
  - e. Appendix E. 40 CFR 63 Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry
  - f. Appendix F. 40 CFR 63 Subpart A – General Provisions
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297, F.A.C. and Chapter 24, Code of Miami Dade County. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the RER or Florida Department of Environmental Protection (FDEP) may require the permittee to conform to new or additional conditions. The RER or FDEP shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the RER or FDEP may grant additional time.  
[Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the RER upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the RER. Such permit shall be obtained prior to beginning construction or modification.  
[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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7. Source Obligation:

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

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

8. Application for Title V Air Operation Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with the FDEP and Miami Dade County rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V air operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the RER may by law require. The application shall be submitted to the RER.

[Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

9. Extension of This Permit: The expiration date of this construction permit may be extended upon request of the owner or operator and submission of the appropriate fee to the Miami-Dade County Department of Regulatory and Economic Resources (RER), Division of Environmental Resources Management, Air Quality Management **at least 60 days prior** to the expiration date of this permit.

[Rule 62-4.030, 62-4.050, 62-4.070(3), and 62-4.220 F.A.C.]

10. Annual Operating Report Required: The Annual Operating Report (DEP Form No. 62-210.900(5)) shall be completed each year and submitted to the Miami Dade County, RER, Air Quality Management Office or submitted electronically to the FDEP by April 1 of the following year.

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

11. Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid and hazardous wastes in accordance with all applicable Federal, State and Local regulations.

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**A. Cement Plant Pyroprocessing & Raw Mill System (EU 028)**

This subsection of the permit addresses the following emissions unit.

<b>Emissions unit No.</b>	<b>Emissions Unit Description</b>
028	<p><b><u>Cement Plant Pyroprocessing and Raw Mill System</u></b></p> <p><i>Existing</i>  <b><u>Air Pollution Control Equipment:</u></b>                      Baghouse ID. 331.BF200 - Main Stack &amp; Dust Collector for Preheater/Kiln/Cooler/Raw Mill/Coal Mill                      Baghouse ID. 331.BF740 - Dust Collector for Kiln Dust Conveyance and Storage Bin                      Baghouse ID. 341.BF350 - Dust Collector for Preheater Feed Silo                      Baghouse ID. 351.BF410 - Dust Collector for Raw Meal Conveyance to CF Blend Silo                      Baghouse ID. 351.BF440 - Dust Collector for Raw Meal Conveyance from Feed Silo to Preheater                      Baghouse ID. 351.BF470 - Dust Collector for Raw Meal Conveyance from Feed Silo to Preheater                      Baghouse ID. 331.BF645 - Dust Collector for Truck Loadout of Kiln Dust</p> <p><b><u>This Project:</u></b>  <i>Permanent burning of whole tires and installation of an automatic tire feeding system. Automatic feed system consists of a trail tipper, bottom hopper, rotating disk separator, roller conveyors, hook elevator, a vertical moving chain with attached hook, and an incline feeding scale; or an equivalent feed system.</i></p>

**EQUIPMENT**

1. **Equipment:** An automatic tire feeding system that consists of a trail tipper, bottom hopper, rotating disk separator, roller conveyors, hook elevator, a vertical moving chain with attached hook, and an incline feeding scale; or an equivalent feed system.  
 [Rule 62-4.070(3) F.A.C., and Permittee Request in Application Received November 12, 2010]

**OPERATIONAL REQUIREMENTS**

2. **Rule Applicability:** This emissions unit shall comply with all the applicable standards contained in 40 CFR 63 Subpart LLL – National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry, and 40 CFR 63 Subpart A – General Provisions.  
 [40 CFR 63.1340]
3. **Hours of Operation:** This emissions unit system is allowed to operate 8760 hours per year.  
 [Rule 62-4.070(3), F.A.C., and 62-210.200(PTE), F.A.C.]
4. **Pyroprocessing System Production Limits:** The maximum production of clinker shall not exceed 250 TPH on a 24-hour block average and 2,190,000 TPY.  
 [Rule 62-210.200 (PTE), F.A.C., and Rule 62-4.070(3), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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5. Coal/Petroleum Coke Maximum Usage: The maximum combined usage of coal and petroleum coke is 30 TPH on a 24-hour block average and 263,000 TPY. The maximum petroleum coke usage rate shall not exceed 20 TPH on a 24-hour block average. Daily records of usage must be kept on site and retained for a minimum of 5 years.  
[Rule 62-4.070(3), F.A.C.]
6. Maximum Whole Tire Feed Rate: The whole tire feed rate either manually or mechanically shall not exceed 1.65 tons per hour based on a 24 – hour block average.  
[Rule 62-4.070(3), F.A.C.]
7. Fuels: Allowable fuels fired in the pyroprocessing/raw mill emission unit shall consist of natural gas, bituminous coal, petroleum coke, No. 2 fuel oil with used oil blend, No. 6 fuel oil with used oil blend, and whole tire derived fuel (WTDF). Whole tires shall not be used as a start-up fuel. Fuel oil includes on-spec used oil (refer to definition in specific condition 18).  
[Rule 62-4.070(3), F.A.C.]

*{Note: There is no heat input limitation. For reference, the design heat input capacities of the kiln burner and calciner burner are 290 million Btu per hour (mmBtu/hr) and 385 mmBtu/hr respectively. The clinker production effectively limits PTE.}*

### EMISSIONS LIMITATIONS AND PERFORMANCE STANDARDS

8. Visible Emissions Limits: Visible emissions are limited to 5 percent from each of the baghouses listed under Emissions Unit 028, except for the main stack baghouse, I.D.331.BF200 (10 percent). Compliance shall be determined in the manner described in 40 CFR 63.1350(a)(4)(i), (ii), (iii) and (iv) below except that the applicable standard is 5% instead of 10%. Numeration tracks the referenced CFR provision.
  - (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under Sections 63.1346 and 63.1348. Such procedures must include the provisions of Paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
    - (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A-7 to 40 CFR 60. The performance test must be conducted while the affected source is in operation.
    - (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of performance testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, 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.
    - (iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of 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 (6) consecutive monthly tests.

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

(iv) If visible emissions are observed during any Method 22 performance test, of Appendix A-7 to 40 CFR 60, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of Appendix A-4 to 40 CFR 60. The Method 9 performance test, of Appendix A-4 to 40 CFR 60, must begin within 1 hour of any observation of visible emissions.

[Rule 62-4.070(3), F.A.C., and 40 CFR 63.1350(a)(4)(i)-(iv)]

*{Note: The applicant advised that the baghouses are designed to control particulate emissions to 0.0095 grains/dry standard cubic foot (gr/dscf). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM<sub>10</sub> for all emission points, except for the main stack, in this emission unit system will be less than 7 TPY. This annual emission estimate is part of the facility-wide netting calculation to escape PSD applicability for PM/PM<sub>10</sub>. Exceedance of the 5% opacity limit shall be deemed an exceedance of this permit condition and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL}*

9. Main Stack - Pyroprocessing/Raw Mill Emission Limits: Emissions exiting the main stack from the Pyroprocessing/Raw Mill system shall not exceed the limits shown in table 1 below:

Table 1

PARAMETER	EMISSION LIMIT	AVERAGING TIME	COMPLIANCE METHOD	LIMIT BASIS
Opacity <sup>6</sup>	10 Percent	6 minute block	COMS, Method 9	PTE, Avoid PSD 40 CFR Subpart LLL
PM <sup>6</sup>	0.063 lb/ton of dry kiln feed	3 hours <sup>5</sup>	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	26.8 lb/hr			
PM <sub>10</sub> <sup>6</sup>	0.053 lb/ton of dry kiln feed	3 hours <sup>5</sup>	Annual Method 5	PTE, Avoid PSD 40 CFR Subpart LLL
	22.5 lb/hr			
SO <sub>2</sub>	0.50 lb/ton of clinker	30 days <sup>2</sup>	CEMS Method 6 or 6C	PTE, Avoid PSD
	320 lb/hour	24 hours <sup>1</sup>		
NO <sub>x</sub> (as NO <sub>2</sub> )	2.17 lb/ton of clinker	12-months <sup>3</sup>	CEMS Method 7 or 7E	PTE, Avoid PSD
	720 lb/hour	24 hours <sup>1</sup>		
CO	2.0 lb/ton of clinker	30 days <sup>2</sup>	CEMS/Method 10	BACT
	576 lb/hour <sup>1</sup>	24 hours <sup>1</sup>		
VOC <sup>4</sup>	0.16 lb/ton of clinker <sup>2</sup>	30 days <sup>2</sup>	CEMS Method 25 or 25A	PTE, Avoid PSD
	40 lb/hour	24 hours <sup>1</sup>		
Mercury (Hg)	229 lb/yr (base + 199 lb/yr)	12-month	Fuels, Materials <sup>8</sup>	PTE, Avoid PSD
Temperature <sup>7</sup>	Baghouse Temperature (T) ≤ T during Dioxin/Furan Tests	Continuous	Established during Method 23	40 CFR 63, Subpart LLL
Dioxin/Furan	0.2 ng TEQ/dscm (T≥204 °C)	3 hours	30 Months, Method 23	40 CFR 63, Subpart LLL
	0.4 ng TEQ/dscm (T<204 °C)			

- 1 Compliance with the short-term emission limit for SO<sub>2</sub>, NO<sub>x</sub>, CO, and VOC shall be based on a 24-hour block average computed in accordance with Specific Condition 14. Compliance with lb/hr SO<sub>2</sub> emissions limitations in this condition will insure compliance with Miami-Dade County Code, Section 24-41.3(2)(a)(i) limiting emissions to 1.2 lb SO<sub>2</sub>/MMBtu heat input when solid fuel is fired, or 0.8 lb SO<sub>2</sub>/MMBtu heat input when liquid fuel is fired, based on a 24 hour average.

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- 2 Compliance with the long-term emission limit for SO<sub>2</sub>, CO, and VOC shall be based on a 30 operating-day block average computed in accordance with Specific Condition 14.
- 3 Compliance with the long-term emission limit for NO<sub>x</sub> shall be based on 12 month rolling average computed in accordance with Specific Condition 14.
- 4 VOC emissions shall be expressed as propane.
- 5 The averaging times for PM and PM<sub>10</sub> correspond to the required length of sampling for the initial and subsequent emission tests (e.g., a minimum of 3 one-hour test runs). Compliance demonstration with these limits shall be conducted pursuant to 40 CFR 63.1349(b)(1).
- 6 Compliance with the Opacity, PM and PM<sub>10</sub> permit limits given for in-line kiln/raw mill will insure compliance with applicable limits from 40 CFR 63, Subpart LLL for the in-line kiln/raw mill, and clinker cooler, and 40 CFR 60, Subpart Y for the coal mill.
- 7 The temperature requirements for the operation of in-line kiln/raw mill are in accordance with 40 CFR 63.1344(a) & (b), and 63.1349(b)(3).
- 8 Determined by raw materials and fuels entering the process. Refer to Conditions 11 and 23.

[Rule 62-210.200, (Definitions – Potential to Emit), F.A.C. to avoid PSD applicability for other pollutants; 62-212.400, F.A.C.; 40 CFR 63.1343 and 63.1345]

*{Permitting Note: For compliance with the long term CO, NO<sub>x</sub>, SO<sub>2</sub>, and VOC limits (30-day block and 12-month rolling averages), the averaging periods began January 1, 2006.}*

10. Mercury Emissions from the Pyroprocessing/Raw Mill System: Mercury emissions exiting the main stack from the Pyroprocessing/Raw Mill system shall not exceed 229 pounds per year on a 12-month rolling basis.  
[Rule 62-4.070(3), F.A.C., and Rule 62-210.200 (Definitions – Potential to Emit), F.A.C. to avoid PSD applicability for Hg]

### TEST METHODS AND MONITORING PROCEDURES

11. Determination of Clinker Production Rate during Testing: Prior to any emission testing to demonstrate compliance with any emission limit, the permittee shall determine the clinker production rate for the test as described in Specific Condition 23. The permittee shall notify the RER of the preheater kiln feed rate and the factor used to determine the clinker production rate in advance of the commencement of any test(s). The rate of clinker production shall be used to determine compliance with all clinker-based emission limits in the permit for that test.  
[RER Requirement. Rule 62-4.070(3), F.A.C.]
12. Testing Procedures and Methods: In addition to the CEMS or COMS compliance requirements listed in Condition 15, the main stack & dust collector, Baghouse I.D. 331.BF200, serving the preheater/kiln/cooler/raw mill/coal mill shall be tested according to the EPA Methods and at the frequencies listed in table 2 below:

Table 2

POLLUTANT	TEST METHOD	FREQUENCY
PM/PM <sub>10</sub>	EPA Method 5	Annual
Opacity	EPA Method 9	Annual
SO <sub>2</sub>	EPA Methods 6 or 6C	Annual*
NO <sub>x</sub> (as NO <sub>2</sub> )	EPA Methods 7 or 7E	Annual*

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CO	EPA Method 10	Annual*
VOC	EPA Methods 25 or 25A	Annual*
Dioxins/Furans	EPA Method 23	30 months

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

[Rules 62-4.070(3), 62-297.310(7) and 62-212.400, F.A.C.]

13. Feed or Fuel Changes and D/F and PM Performance Testing: The owner or operator shall notify the compliance authority prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for D/F or PM. For purposes of this condition, significant means any of the following: a physical or chemical change in the feed or fuel; the use of a raw material not previously used; a change in the loss on ignition (LOI) characteristic of the fly ash; a change between non-beneficiated fly ash and beneficiated fly ash. Based on the information provided, the compliance authority will, within seven days of notification from the permittee, determine if the proposed change would be reasonably expected to cause a change in D/F emissions such that performance testing pursuant to 40 CFR 63.1349 will be required for the new feed or fuel. If the compliance authority fails to respond within seven days of notification and the permittee believes such change would not reasonably be expected to cause an increase in D/F emissions that might jeopardize compliance with the applicable D/F standard, the change may be implemented immediately without performance testing. A significant change shall not include switching to a feed/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM emission limits. [Rule 62-4.070(3), F.A.C.]
14. Continuous Emission Monitoring Systems: The owner or operator shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) in the in-line kiln/raw mill stack to measure and record the emissions of NO<sub>x</sub>, SO<sub>2</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. The CEMS systems shall express the results in units of pounds per ton of clinker produced and pounds per hour. Emissions of VOC shall be reported in units of the standards (lb/hour, lb/ton clinker) and ppmvd as propane corrected to 7% oxygen.
- Compliance Demonstration*: Compliance with the short-term emission limits for NO<sub>x</sub>, SO<sub>2</sub>, CO, and VOC shall be based on a 24-hour block average. The 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average values. If there are less than 24 hours during the block, the 24-hr block average shall be the average of all valid hourly average values available during the 24 hour block. Compliance with the long-term emission limits for SO<sub>2</sub>, CO, and VOC shall be based on a 30 operating-day block average that shall be computed as the arithmetic average of all valid hourly averages occurring within each 30 operating-day block. For purposes of the SO<sub>2</sub>, CO, and VOC long-term emission limits, an operating day is any day that the kiln produces clinker or fires fuel. The first 30 operating day block shall begin the first operating day on or after January 1, 2006.
  - Compliance with the long-term NO<sub>x</sub> emissions limit*: Compliance with the long-term NO<sub>x</sub> emission limit shall be based on a 12 month rolling average that shall be recomputed each month as the arithmetic average of that month and the preceding 11 months. Each monthly average shall be computed by averaging all valid hourly averages occurring within each calendar month. The first 12 month period shall commence on January 1, 2006.
  - Valid Hourly Averages*: Each hourly average shall be computed as the arithmetic average of the data points generated by the CEM system. Data points must be generated at least once per

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minute. For an hourly average to be considered valid, at least two data points separated by a period of 15 minutes or more must be used to compute the hourly average.

- Hours during which there is no preheater feed and no fuel fired to the kiln systems are not valid.
  - Hours during which the plant is firing fuel but producing no clinker are valid, but these hours are excluded from the production-normalized emission rate computation (pounds per ton of dry preheater feed or pounds per ton of clinker). These hours are included in any pollutant mass emission rate computation (pounds per hour).
- d. *Data Availability:* During each semiannual (six-month) period, CEM system valid hourly averages shall be obtained for at least 95 percent of the operating hours for which the plant is producing clinker. If the CEM system does not obtain valid hourly averages for 95 percent or more of the operating hours per semiannual period for which the plant is producing clinker, the permittee shall also submit a continuous monitoring system performance report with the excess emissions report. This report must include corrective actions, and it shall be submitted within 30 days following the end of each reporting period.
- e. *Compliance Assurance:* CEM system breakdowns, malfunctions, repairs, calibration checks, zero adjustments, and span adjustments all result in periods during which CEM system data are not obtained. During such periods in excess of five percent of the total operating hours per calendar quarter, the permittee shall assure compliance with the emissions standards of this permit through stack tests, alternative monitoring systems, or other methods as approved by the Department.

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

15. Continuous Emissions Monitor System (CEMS) Requirements: All CEM systems shall be operational, recording and continuously transmitting available data. The monitoring systems shall be certified in accordance with the appropriate Performance Specification in 40 CFR 60 Appendix B. The systems shall comply with the requirements for continuous monitoring systems found in the general provisions of 40 CFR 63, Subpart A including development of a quality control program. Data on monitoring equipment specifications, manufacturer, type calibration and maintenance requirements, and the proposed location of each monitor shall be provided to the RER for review at least 45 days prior to replacement of any CEMS. [Rules 62-4.070(3), and 62-204.800, F.A.C.]

16. Mercury Compliance Demonstration: The owner or operator shall demonstrate compliance with the allowable emissions limiting standards for mercury (Hg) by using option a or b of this condition:

a) *Material Balance Demonstration:*

- 1 Samples of the raw mill feed and all fuels (except whole tires) shall be collected each day. A single composite daily sample shall be made from all samples collected during a day. A monthly composite sample shall be made from each of the daily composite samples.
- 2 Each monthly composite sample shall be analyzed to determine the representative mercury concentration for the month.
- 3 For each composite sample, the monthly mercury throughput rate (pounds per month) shall be the product of the mercury concentration from the monthly composite sample and the corresponding monthly processing rate.
- 4 When whole tires are used as an alternate fuel, in lieu of a composite sampling of the tires, the monthly mercury throughput rate from whole tires shall be the product of the monthly whole tire processing rate (kg of whole tires/month) and a mercury concentration of 0.1 mg of mercury per kg of whole tires.



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- 5 For each month, the mass of mercury introduced into the pyroprocessing system (pounds per month) shall be the sum of the monthly mercury throughput rates for each raw material and all fuels (including whole tires) minus the amounts in the clinker and permanently withdrawn dust.
- 6 The consecutive 12-month mercury throughput rate shall be the sum of the individual monthly records for the current month and the preceding eleven months (pounds of mercury per consecutive 12-months). Such records, including calculations and data, shall be completed no later than 25 days following the month of the records. The first 12-month rolling period shall begin on August 1, 2006.
- 7 The analytical methods used to determine mercury concentration shall be EPA or ASTM methods such as EPA Method 7471A (Mercury in Solid or Semisolid Waste) or EPA Method 7473 (Mercury in Solids and Solutions by Thermal Decomposition, Amalgamation, and Atomic Absorption Spectrophotometry). No other methods may be used unless prior written approval is received from the RER. If the mercury concentration is below detection limit or below the limits of quantification, the detection limit will be assumed for the concentration of the raw material or fuel, the permittee shall report the detection limit as the corresponding level.

b) *Mercury Continuous Emissions Monitoring System (Hg-CEMS):*

The permittee shall install any model of Hg-CEMS that has been demonstrated to meet the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. During the subsequent 90 days, the permittee shall certify the Hg-CEMS and begin reporting Hg mass emissions data. The permittee shall adhere to the calibration drift and quarterly accuracy assessment procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The 12-month rolling mass emissions and average monthly mass emissions shall be reported based on the actual data collected not later than 10 days following the end of month. Upon certification, the permittee may use the Hg-CEMS to demonstrate compliance with the cumulative 12-month rolling mass emission limitation as specified in Permit 0250020-019-AC/PSD-FL-360A, in lieu of the procedures described in the preceding paragraph. Prior to use of the Hg-CEMS as the method to demonstrate compliance, the permittee shall submit written notice to the FDEP, and receive approval for a missing data substitution plan. The installed Hg-CEMS shall be capable of speciating the form of Hg measured as Hg(0) and Hg++ but will be held only to the manufacturer's performance specifications for the total (i.e. all Hg) values. The owner or operator may submit an alternative sampling procedure request to the Department for evaluation by EPA to use the Hg-CEMS or the associated relative accuracy test audit (RATA) to demonstrate compliance with the Hg test requirements pursuant to 40 CFR 63, Subpart LLL.

[Rules 62-4.070(3), 62-212.400 (12)(c ) and 62-204.800, F.A.C.; Compliance with 229 lb Hg/12-month limitation]

17. Mercury Compliance Option Selection Notification: If the permittee wants to change the compliance testing option for the facility to comply with the mercury standards, the permittee shall obtain prior written approval from the RER before switching.

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

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**ON-SPECIFICATION USED FUEL OIL**

18. Limits and Test Methods Applicable to On-Spec Fuel Oil:

- a. "Non-hazardous on-specification" used oil is defined as each used oil delivery that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications in table 3 listed below. Used oil that does not meet all of the following specifications shall not be fired.

Table 3

CONSTITUENT/PROPERTY	LIMIT	TEST METHOD <sup>(2)</sup>
Arsenic	5 ppm	EPA SW-846 (3040-7130)
Cadmium	2 ppm	EPA SW-846 (3040-7130)
Chromium	10 ppm	EPA SW-846 (3040-7130)
Lead	100 ppm	EPA SW-846 (3040-7130)
Total Halogens	<1000 ppm <sup>(1)</sup>	ASTM E442
PCBs	<50 ppm	ASTM D4059
Flash Point	100 °F (minimum)	ASTM D93
Sulfur	% by weight (informational)	ASTM D2622, D4294-90, or both D4057-88 & D129-91
Heat of Combustion	Btu/gal (informational)	ASTM D240-76
Density	Lb/gal (informational)	ASTM D1298-80

<sup>(1)</sup> 40 CFR 279.10(b)(1) (ii) *Rebuttable presumption for used oil.* Used oil containing more than 1,000 ppm total halogens is presumed to be a hazardous waste because it has been mixed with halogenated hazardous waste listed in subpart D of 40 CFR part 261. Persons may rebut this presumption by demonstrating that the used oil does not contain hazardous waste (for example, by using an analytical method from SW-846, Edition III, to show that the used oil does not contain significant concentrations of halogenated hazardous constituents listed in appendix VIII of 40 CFR part 261). EPA Publication SW-846, Third Edition, is available from the Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954, (202) 512-1800 (document number 955-001-00000-1"). If successfully rebutted for used oil up to 4000 ppm total halogens, used oil up to 4000 ppm maximum total halogens may be fired.

<sup>(2)</sup> Other test methods may be used only after receiving written approval from the RER.

- b. *Analysis of Used Oil Fuel.* The permittee may determine that the used oil to be burned for energy recovery meets the fuel specifications of 40 CFR 279.11 by performing analyses, or obtaining copies of analyses or other information, documenting that the used oil fuel meets the specifications.
- c. *Record Retention.* The permittee must keep copies of analyses of the used oil (or other information used to make the determination) for five years.
- d. *Fuel Analysis for On-specification Used Oil Requirements.* Fuel analysis shall be in accordance with 40 CFR 266.43(b)(1) & (6). A sample shall be taken from the outlet of the blend tank on the first working day (i.e., Monday-Friday; exceptions: holidays) of each month, if any used oil was placed in the blend tank the previous month; or, the sample can be taken directly from the used oil mobile collection tank after final collection and prior to the time of initial transfer; but, that sampling frequency shall be no less than quarterly and the sampling methodology shall have been established

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with the RER, Miami-Dade County prior to sampling. Upon taking a sample, the sample shall be analyzed for the following constituent/property and associated unit and using the following test methods (or their latest version):

- e. *Submittal of Samples.* The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the RER within 30-days after the sample is taken and analyzed.
- f. *Sample Results.* The results of each sample analysis (on the laboratory's letterhead) shall be submitted to the RER within 30 days after a sample is taken and analyzed.

[Rule 62-4.070(3), F.A.C., 40 CFR 279.11 (which is adopted by reference in Rule 62-710.210(2), F.A.C.), 40 CFR 279.72; 40 CFR 63.1343 and 63.1345]

19. Used Oil Usage Records: In order to document compliance with the used oil limitations, the following requirements shall be adhered to as a minimum:

- a. *Transfers to Storage Tank.* The dates and quantities of both on-specification used oil and purchased fuel oil transferred to the in-line kiln/raw mill's storage tank shall be reported quarterly (i.e., Jan.-Mar., April-June, July-Sept., and Oct.-Dec.) to the RER and due during the month following the end of the quarter.
- b. *Recordkeeping.* When burning used oil, records shall be maintained in accordance with applicable provisions of 40 CFR 279, Subpart B and Subpart G (July 1, 1996 version), Standards for the Management of Used Oil and Chapter 62-710, F.A.C.
- c. *Delivery Receipts.* The following shall be recorded on the delivery receipt:
  - the use of tamper proof seals on the delivery receipt
  - the volume of fuel delivery
  - a cross reference to the analysis which establishes that the used oil meets EPA used oil fuel specifications
  - the results of the screening analysis
  - the name of the person performing the test
  - the specific test kit used
  - the amount of oil sampled
  - the amount and name of the solution used to dilute the oil
- d. *Delivery Procedures.* The following procedures shall be implemented:
  - On and off specification used oil that is delivered without a delivery receipt containing all the above information, or which is not properly sealed, or for which the delivery receipt does not contain all the necessary information, is not to be accepted and the RER is to be notified by phone immediately (with written confirmation to follow), if such a delivery is attempted.
  - Verification by signature on the delivery receipt shall be provided by plant personnel that the delivery truck arrived on site with all seals intact. As delivered samples of all used oil fuel received shall be accumulated through each quarter for each supplier.

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

20. Whole Tire Burning: In order to document compliance with whole tire fuel usage limits, the following records shall be established and maintained:

- (1) A log to document the number of hours per day, and number of days per month that whole tires were introduced into the kiln.
- (2) A log indicating the whole tire utilization rate in tons per hour, as well as the dates and times whole tires were utilized.

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(3) A log that includes the date of all whole tire deliveries to the facility, and the quantity of whole tires received (in tons) in each delivery.

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

21. PSD Pollutant Emissions Monitoring, Reporting and Recordkeeping: The permittee shall monitor the emissions of any PSD pollutant that the RER identifies (PM, PM<sub>10</sub>, CO, NO<sub>x</sub>, and SO<sub>2</sub>) 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 five (5) years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations if the change increases the design capacity of that emissions unit or its potential to emit that PSD pollutant. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.

[Rules 62-212.300(1)(e)1, and 62-4.070(3), F.A.C.]

22. Additional PSD Pollutant Record Keeping & Reporting: The permittee shall report to the RER within sixty (60) days after the end of each year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

- a. The name, address and telephone number of the owner or operator of the major stationary source;
- b. The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.
- c. If the emissions differ from the preconstruction projection, an explanation as to why there is a difference.
- d. Any other information that the owner or operator wishes to include in the report.

[Rules 62-212.300(1)(e)1, and 62-4.070(3), F.A.C.]

### PROCESS AND PRODUCTION RECORDING

23. Production Rate Recording: The owner or operator shall record the preheater kiln feed rate using the F.L. Smidth automated preheater feed weighing device and record the daily clinker production. The clinker production rate for the purposes of determining compliance with Specific Condition 4, shall be determined as the product of Preheater Kiln Feed and the Loss on Ignition (LOI) factor. LOI for the preheater kiln feed is based on a 30 operating-day block average of daily measurements. For purposes of this requirement, an operating day is any day that the kiln produces clinker or fires fuel. The calculation shall be expanded as needed to consider the additional feed points and LOI.

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

24. Excess Emissions Reports: In case of excess emissions resulting from malfunctions, the owner or operator shall notify the RER in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report.

[Rules 62-210.700(6) and 62-4.070(3), F.A.C.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**B. Cement Plant Pyroprocessing & Raw Mill System (EU 028)**

This subsection of the permit addresses the following emissions unit.

Emissions unit No.	Emissions Unit Description
028	<p><b><u>Cement Plant Pyroprocessing and Raw Mill System</u></b></p> <p><i>Existing</i>  <u>Air Pollution Control Equipment:</u>                      Baghouse ID. 331.BF200 - Main Stack &amp; Dust Collector for Preheater/Kiln/Cooler/Raw Mill/Coal Mill                      Baghouse ID. 331.BF740 - Dust Collector for Kiln Dust Conveyance and Storage Bin                      Baghouse ID. 341.BF350 - Dust Collector for Preheater Feed Silo                      Baghouse ID. 351.BF410 - Dust Collector for Raw Meal Conveyance to CF Blend Silo                      Baghouse ID. 351.BF440 - Dust Collector for Raw Meal Conveyance from Feed Silo to Preheater                      Baghouse ID. 351.BF470 - Dust Collector for Raw Meal Conveyance from Feed Silo to Preheater                      Baghouse ID. 331.BF645 - Dust Collector for Truck Loadout of Kiln Dust</p> <p><u><i>This Project:</i></u>  <b>This project is to conduct a trial burn firing whole tires into the kiln system</b></p>

**OPERATIONAL REQUIREMENTS**

1. Rule Applicability: This emissions unit shall comply with all the applicable standards contained in 40 CFR 63 Subpart LLL – National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry, and 40 CFR 63 Subpart A – General Provisions.  
[40 CFR 63.1340]
2. Other Permits: The conditions of this permit temporarily supplement all previously issued air construction permits and the current Title V air operation permit for this emissions unit. The conditions in this permit are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of those permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc., except as otherwise authorized by conditions of this permit.  
[Rule 62-4.070(3), F.A.C.]
3. Alternate Fuel Authorization: For this trial burn, whole tires may be used as supplemental, non-start up alternative fuels in the pyroprocessing system (kiln and precalciner).  
[Rule 62-4.070(3), F.A.C.]
4. Permit Requirement: The permittee will be required to submit an application for and obtain a separate air construction permit prior to receiving authorization to burn whole tires at a rate higher than 1.65 TPH on a permanent basis. The application must include a PSD applicability analysis for all regulated pollutants.  
[Rule 62-4.070(3), F.A.C.]

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5. Trial Burn Notification Requirement: The permittee shall notify the RER, Air Quality Management, prior to beginning a trial burn period. This notification shall include the start date, end date, and the facility's plan of action for the trial burn period. In the event of any new or revised trial burn period, the permittee shall again provide this office with a new trial burn notification. Such notification is required for each trial burn period. If a trial burn is stopped ahead of schedule, a notification shall also be submitted to notify of the actual end date for that specific trial period. Notification by fax submittal is acceptable.  
[Rule 62-4.070(3), F.A.C.]
6. Trial Burn Day: For the purposes of this permit, a trial burn day is any day during a notified trial burn period, when whole tires are introduced into the kiln.  
[Rule 62-4.070(3), F.A.C.]
7. Trial Burn Period: The permittee is authorized to burn whole tires for a maximum of one hundred and twenty (120) operating days. This one hundred and twenty (120) operating day trial burn period shall include the days when emissions tests are conducted. The total trial burn period of 120 days of trial burn may include several trial burn periods. The trial burn shall be completed within two (2) years of the effective date of this permit.  
[Rule 62-4.070(3), F.A.C.]

### CONTINUOUS MONITORING REQUIREMENTS

8. Emissions Monitoring:
  - a) Prior to the expiration date of this permit, and while using whole tires as an alternate fuel, the permittee shall demonstrate compliance with each emission standard for pollutants PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, and opacity standards. The emissions standard for each pollutant is listed in the facility's current and valid Title V Air Operation Permit.
  - b) During the whole tire trial burn, the owner or operator shall use stack testing as the method of compliance for PM, and PM<sub>10</sub>. The test report for each pollutant shall include the whole tire feed rate, the amount and type of fuels used during that specific test, and the number of times a trial was stopped and the reason for stopping a trial.
  - c) During the whole tire trial burn, the owner or operator may use the continuous emissions monitoring system (CEMS) data for NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC, and the continuous opacity monitoring system (COMS) data for opacity for the in-line kiln/raw mill to demonstrate compliance. In the event that CEMS or COMS are used to demonstrate compliance, the permittee shall provide applicable hourly summary records of the CEMS and COMS data for the entire trial burn period, and for thirty (30) operating days prior to the trial burn period. Such CEMS and COMS data shall be submitted to the RER within 60 days of completion of the trial burn.

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

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**TESTING REQUIREMENTS**

9. Compliance with the allowable emission limiting standards for the trial burn stack testing shall be determined by using the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 61 Appendix B adopted by reference in Chapter 62-204, F.A.C.

This emission unit shall comply with all applicable requirements of Rule 62-297.310, F.A.C., General Test Requirements. See Table 4 below:

Table 4

Pollutant Name or parameter	EPA/Reference Method	Compliance Test Duration
PM/PM <sub>10</sub>	Method 5 or 201/201A	3 one-hr runs

10. **Test Requirements:** The permittee shall notify the RER in writing at least fifteen (15) days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit and the current Title V Air Operation Permit. When in conflict, the permittee shall follow the requirements of the current Title V Air Operation Permit. [Rule 62-297.310(7)(a)9, F.A.C.]

**NOTIFICATION, RECORDKEEPING AND REPORTING REQUIREMENTS**

11. **Whole Tire Burning:** In order to document compliance with whole tire fuel usage limits, the following records shall be established and maintained:

- (1) A log to document the number of hours per day, and number of days per month that whole tires were introduced into the kiln.
- (2) A log indicating the whole tire utilization rate in tons per hour, as well as the dates and times whole tires were utilized.
- (3) A log that includes the date of all whole tire deliveries to the facility, and the quantity of whole tires received (in tons) in each delivery.

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

12. **Stack Test Reports:** The permittee shall prepare and submit reports for all required stack tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall indicate: the fuel firing rate of each fuel (tons/hour), heat input rates from firing each fuel (MMBtu/hour), the percent of whole tires fired and the temperature at the baghouse inlet.

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

13. **Stack Test Report Submittal:** The permittee shall submit a stack test report within forty-five (45) days after the last sampling run of each test is completed.

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

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

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14. Trial Burn Summary Report: Within sixty (60) days of completing the temporary trial, the permittee shall submit a summary report to the RER. The summary report shall include the following:

- Each trial burn start and end date.
- The percent fuel substitution.
- A complete schedule of the times the tires were fed into the kiln.
- The analytical results.
- The problems with unloading, storing, handling or firing whole tires.
- The emissions monitoring data.
- The kiln production/process data.
- The inlet temperatures to the baghouse.
- A conclusion as to the feasibility and practicality of whole tires as a supplemental fuel.

The report shall specifically identify any problems that occurred during the trial and the expected cause of the problem.

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