DRAFT

PERMITTEE

CEMEX Construction Materials Florida, LLC
10311 Cement Plant Road
Brooksville, Florida

Authorized Representative:
Jim Daniel, Cement Plant Manager

Air Permit No. 0530021-031-AC
Permit Expires: May 25, 2013

Brooksville South Cement Plant
Temporary Trials of Alternative Fuels

PROJECT

CEMEX Construction Materials Florida, LLC operates an existing Portland cement manufacturing plant, which is categorized under Standard Industrial Classification Code No. 3241. The existing Brooksville South Cement and Power Plant is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. The UTM coordinates of the existing facility are Zone 17, 360.0 kilometers (km) East, and 3162.5 km North.

This is the final air construction permit, which authorizes short-term temporary trials to co-fire coal with each of the following alternative fuel materials in the existing cement kiln (Kiln 2) to gather operational and emissions data: non-chlorinated agricultural plastics, tire-derived fuel including tirefluff, reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts, pre-consumer reject paper, carpet-derived fuel and on-specification used oil generated off-site. This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

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

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

Executed in Tallahassee, Florida

DRAFT

_____ _____

Mike Halpin, Director (Date)
Division of Air Resource Management

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 with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on _____ DRAFT _____ to the persons listed below.

cc: Mr. Jim Daniel, CEMEX (jdaniel@cemexusa.com)
Mr. George Townsend, CEMEX (gtownsend@cemexusa.com)
Mr. Max Lee, Ph.D., P.E., Koogler and Associates, Inc. (mlee@kooglerassociates.com)
Mr. John Koogler, Ph.D., P.E., Koogler and Associates, Inc. (jkoogler@kooglerassociates.com)
Ms. Cindy Zang-Torres, DEP Southwest District Office (cindy.zhang-torres@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
Ms. Ana M. Oquendo, EPA Region 4 (oquendo.ana@epa.gov)
Mr. David Langston, EPA Region 4 (langston.david@epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

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.

DRAFT

_____ _____
(Clerk) (Date)

FACILITY DESCRIPTION

The existing facility consists of a Portland cement manufacturing plant, the associated quarry, and raw material, cement handling operations , a 150 MW power plant and a coal yard. Portland Cement Line 1 includes an in-line kiln/raw mill, clinker cooler and associated process equipment. This line shares a common baghouse. Waste heat from the kiln is used to provide heat to the raw mill and the kiln preheater, which is used to drive off moisture from the materials used for making clinker. All of the materials handling activities are controlled by fabric filter baghouse control systems, except for the Clinker Receiving/Handling System and the coal yard activities. For the Clinker Receiving/Handling System, the fugitive particulate matter emissions generated from the transfer of clinker from the receiving hopper to the belt conveyor are controlled using a dust suppression system.

Portland Cement Line 2 includes a raw mill system, a dry process preheater/precalciner kiln system, clinker handling system, finish grinding operations, two cement loadout silos, and coal handling and grinding operations. NO_X emissions are controlled by the use of Selective Non-catalytic Reduction (SNCR) technology. SO_2 emissions are controlled by use of low sulfur raw materials and inherent scrubbing by finely divided lime in the calciner and limestone in the raw mill. CO and VOC emissions are controlled by promoting complete combustion in the kiln and calciner and minimizing carbon and oily content of raw materials. PM/PM_{10} from the pyroprocessing system and the clinker cooler are controlled by large fabric filter baghouses. Mercury emissions are controlled by material balance with a minimum of quarterly analysis of raw material samples and making and maintaining records of monthly and rolling 12-month mercury throughput. All of the materials handling activities' particulate matter emissions are controlled by fabric filters. Water sprays or chemical wetting agents and stabilizers will be used at the coal receiving area, the coal storage area, and the coal transfer system to control fugitive particulate matter emissions and minimize visible emissions. Continuous monitors are operated for opacity, NO_X, SO_2, THC and CO.

Portland Cement Line 2 has a capacity of 206.3 tons per hour of material fed (dry basis) to the preheater, and 125 tons per hour of clinker production. Daily and annual rates are 1,686,300 tons per year (4,620 tons/day, 24-hour average) of material fed to the preheater (dry basis), 1,022,000 tons per year (2,800 tons/day, 24-hour average) of clinker production, and 1,301,138 tons per year (5,760 tons/day) of cement production. Fuels allowed to be used in the pyroprocessing system are natural gas, distillate fuel oil, on-specification used oil, coal, petroleum coke, propane, flyash and tire derived fuels. Line 2 also includes a coal processing operation that crushes coal and petroleum coke and has an annual processing capacity of 165,000 tons of coal and petroleum coke.

PROPOSED PROJECT

This is the final air construction permit, which authorizes temporary short-term trials to co-fire coal with each of the following alternative fuel materials in the existing cement kiln to gather operational and emissions data: non-chlorinated agricultural plastics, tire-derived fuel including tirefluff, reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts, pre-consumer reject paper, carpet-derived fuel and on-specification (on-spec) used fuel oil generated off-site. This authorization is only for the temporary trials as conditioned by the permit to determine the operational viability of each fuel, the impacts on emissions and the effect on cement quality. The information will be used to determine whether a material is suitable as alternative fuel for co-firing with coal in the cement kiln, which may require additional testing. To obtain permanent authorization for any of the alternative fuel materials, the permittee must submit an additional application and obtain an air construction permit. The information gathered during the trial burn period may be used to support such an application or a project for a longer trial.

This project will affect the following existing permitted emissions unit.

Facility ID No. 0530021	
ID No.	**Emission Unit Description**
044	Cement Line 2: Kiln 2, In-line Raw Mill, Pre-Heater, Pre-Calciner and Clinker Cooler

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a PSD major stationary source in accordance with Rule 62-212.400, F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to PSD applications for permits to construct or modify emissions units shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to construct minor sources of air pollution or to operate the facility shall be submitted to the Air Resource Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resources Section of the Department's Southwest District Office at 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (On-Specification Used Oil Requirements); and Appendix E (Criteria for Material Suppliers).

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

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

6. Modifications: No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. 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.]

A. Kiln 2 System – Short -Term Trial of Miscellaneous Alternative Fuel Materials

This section of the permit addresses the following emissions unit.

ID	Emission Unit Description
044	Cement Line 2: Kiln 2, In-line Raw Mill, Pre-Heater, Pre-Calciner and Clinker Cooler

COMPLIANCE WITH EXISTING PERMIT CONDITIONS

1. Existing Permits: This permit supplements all existing valid air permits. The permittee shall continue to comply with all applicable conditions from valid air construction and operation permits. [Rule 62-4.070(3), F.A.C.]

EQUIPMENT

2. Temporary Equipment: The permittee is authorized to temporarily install and operate the following equipment for the trial: a Schenk feeder system or equivalent to measure and dose alternative fuel materials through the injection feed lines; a hopper; a conveyor; ductwork; and other miscellaneous equipment to unload, store and handle the alternative fuel materials. The feeder system shall be integrated with the operation and monitoring system currently in use in the operator control room and tied into the existing Data Retrieval System. There shall be a visible display of the alternative material feed rate at the feeder system as well as in the operator control room. The alternative material feed rate shall be recorded along with the other fuel and material feed rates. [Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

PERFORMANCE RESTRICTIONS

3. Authorization: The permittee is authorized to conduct a short-term operational trial for each of the following alternative fuel materials. Each alternative fuel trial is limited to no more than 60 operating days while co-firing coal. Each alternative fuel material shall be tested separately from other alternative fuel materials. Only one alternative fuel material at a time shall be co-fired with coal.

   a. *Non-Chlorinated Agricultural Plastics*: This material consists of non-chlorinated, low-density polyethylene (LDPE) and/or high-density polyethylene (HDPE) plastic used primarily in agricultural and silvicultural operations to prevent weed growth, control soil erosion and moisture exposure. No more than 3,000 tons shall be fired in the kiln.

   b. *Tire-Derived Fuel and Tirefluff (TDF)*: This material consists of shredded used tires which may have steel belt material and also includes the shredded materials from the crumb of tires with no metal. No more than 4,500 tons shall be fired in the kiln.

   c. *Manufacturer Reject Roofing Shingles*: This material shall consist of manufacturer reject shingles that were never installed and which the manufacturer certifies as being “asbestos free”. The incombustible grit material shall be removed from the shingles prior to delivery. No more than 10,000 tons shall be fired in the kiln.

   d. *Clean Woody Biomass*: This material will include 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. This material excludes copper-chromium-arsenic (CCA)-treated wood, creosote-treated wood, construction and demolition (C&D) debris, plywood, particle board, medium density fiberboard, oriented strand board, laminated beams, finger-jointed trim and sheet goods. No more than 10,000 tons shall be fired in the kiln.

   e. *Agricultural Organic Fibrous Byproducts*: This material includes peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts, animal bedding, etc. Other similar types of materials may be tried with prior written approval of the Department. No more than 5,000 tons of any single type of agricultural organic fibrous byproduct shall be fired in the kiln. Only one type of agricultural organic fibrous

byproducts shall be stored on site at any given time. No more than 20,000 total tons of agricultural organic fibrous byproducts shall be fired in the kiln.

f. *Pre-Consumer Paper*: This material consists of pre-consumer: printing and writing paper; household and sanitary paper; wrapping and packaging paper; paper board; chipboard; Kraft liner, writing and packaging paper; fluting; other wrapping and packaging paper; folding boxboard; other paperboard; polymer laminated wrapping paper; game boards and boxes; foil wrapping paper; thermal papers; specialty papers for filtration or hygienic applications; adhesive labels; waxed corrugated cardboard; and other miscellaneous coated papers. This group of materials also includes fabrics and textiles such as dyed/finished natural fibers, dyed/finished natural fiber woven/scrap trim, polymer fiber woven scrap trim, and un-dyed/unfinished natural or synthetic fiber scrap trim. No more than 5,000 tons shall be fired in the kiln.

g. *Carpet-Derived Fuel*: This material consists of *shredded* used carpet. No more than 6,500 tons shall be fired in the kiln.

h. *On-Specification Used Oil Generated Off-Site*: This material is on-spec used oil that has been generated off-site. No more than 111,111 gallons (400 tons) shall be fired in the kiln.

i. *Expiration and Revocation*: Authorization to fire each alternative fuel material expires with this permit, at the end of 60 operating days of firing the alternative fuel or when the permitted amount of material has been fired. The Department may require the trial of an alternative fuel material to stop if:

a) The permittee accepts alternative fuel material that does not meet the acceptance criteria based on analytical results provided by the material suppliers.

b) The analytical results of samples taken by the plant vary widely with those provided by the material suppliers.

c) The firing of an alternative fuel material causes frequent upsets to kiln operation resulting in non-steady state operation; or

d) The pyroprocessing kiln is unable to comply with the emissions standards in the Title V air operation permit.

[Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

4. Material Suppliers: The permittee shall provide each material supplier with a copy of this air construction permit including the Appendix E (Criteria for Material Suppliers). [Rule 62-4.070(3), F.A.C.]

5. Accepting Shipments of Alternative Fuels: The permittee shall receive alternative fuel materials only in covered trucks (approximately 20 tons per truckload). The alternative fuel materials shall be unloaded and stored most likely in a trailer or under cover on top of a paved or compacted clay surface. Materials will be stored in separate piles, most likely in trailers, and visibly marked. Alternative fuel materials delivered to the site shall be burned in the kiln during the 60-day trial or removed from the site within 14 days of completing the trial. No more than 5,000 tons (of the allowable 20,000 tons) of agricultural organic fibrous byproducts shall be stored on site at any given time. The permittee shall obtain copies from the material supplier of manufacturer certifications (as applicable), analytical results and the amount (tons) for each delivery. A delivery may consist of more than one truckload. For acceptance of on-specification used oil, a certified fuel analysis indicating the oil meets the on-specification requirements (see Appendix D) in 40 CFR 279 shall accompany each delivery. See Appendix E (Criteria for Material Suppliers) of this permit for material processing procedures. [Rule 62-4.070(3), F.A.C.]

6. Fugitive Dust: To prevent fugitive dust caused by any alternative fuel materials from leaving the property, the plant shall apply water if necessary; otherwise, the material shall be kept dry to facilitate burning. [Rule

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

7. Operation: Alternative fuel materials shall only be fired when the kiln has achieved stable operation, temperatures and production. Alternative fuel materials shall not be fired during startup, shutdown, malfunction or other non-steady state operation. [Rule 62-4.070(3), F.A.C.]

8. Capacity: During each designated trial, an alternative fuel material may be co-fired with coal in the existing cement kiln at the following approximate maximum rates:

Material	Estimated Maximum Firing Rates (tons/hour)
Non-Chlorinated Agricultural Plastics	4
Tire Derived Fuel	4.5
Roofing Shingles	12
Clean Woody Biomass	14
Agricultural Byproducts	25
Paper	11
Carpet Derived Fuel	7.5
On-Spec Used Oil Generated Off-Site	3.0

{Permitting Note: Since the feeder system is limited by volumetric throughput, the maximum mass feed rates will also be variable based on the material densities. Each trial will be used to determine the maximum sustainable mass feed rate of each alternative fuel material.} [Application No. 0530021-031-AC and Rule 62-210.200(PTE), F.A.C.]

9. Sampling/Analyses: At least once every four hours while firing an alternative fuel material, the permittee shall take a grab sample of as-fired material (approximately one gallon) before being dumped into the feed bin of the feeder system. At the end of each day, the grab samples shall be thoroughly mixed and a composite sample made (approximately 2 lb). Each representative composite sample shall be analyzed for the following: heating value, moisture, density, volatiles, ash, sulfur, chlorine, fluorine and metals (including arsenic, cadmium, chromium, copper, lead and mercury). The composite samples for non-chlorinated agricultural plastics shall also be analyzed for pesticides, bromine and thallium. The composite samples for TDF shall also be analyzed for zinc. The composite samples for manufacturer reject roof shingles shall also be analyzed for manganese, nickel and zinc. After analysis of at least 10 samples of each material, CEMEX may request in writing for approval from BAR to reduce the sampling frequency; however, samples shall be taken whenever stack testing is conducted. [Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

MONITORING REQUIREMENTS

10. Operations and Emissions: During the trial period, the permittee shall continue to monitor: NO_X, SO_2, CO and total hydrocarbons (THC) emissions with the existing certified CEMS; opacity with the existing certified COMS; and the fuel feed rates, kiln feed rates, clinker production rate and baghouse inlet temperature with the existing continuous monitoring systems. Mercury emissions shall be determined by material balance. [Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

11. Upsets: When an upset condition causes the plant to stop firing an alternative fuel that results in non-steady state operation, the permittee shall record each incident and identify the cause of the upset as well as the corrective action taken. [Rule 62-4.070(3), F.A.C.]

12. Process Monitoring: For the trial, the plant will monitor: the sampling and analysis procedures used; the

analytical results of the alternative fuel materials, the fuel feed rates, the kiln feed rates, the clinker production rates, pre-calciner temperature and the baghouse inlet temperature. [Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

TESTING REQUIREMENTS

13. Compliance Tests: The permittee shall conduct the following stack tests to determine compliance with the dioxin/furan and particulate matter emissions standards as well as the emission rates of hydrochloric acid (HCl) and metals while operating the cement kiln at permitted capacity and firing the maximum sustainable feed rate of the alternative fuel material. The feed rate achieved during the stack tests will be used to establish the maximum feed rate for any subsequent request to permanently fire the alternative fuel material.

    a. *PM Stack Tests*: In accordance with EPA Method 5, the permittee shall conduct a stack test with the raw mill up to determine compliance with the PM emissions standard while co-firing coal with either clean woody biomass or one of the agricultural byproducts. The stack test shall consist of at least three, 1-hour test runs.

    b. *Dioxins/Furans Stack Tests*: In accordance with EPA Method 23, the permittee shall conduct a stack test with the raw mill up to determine compliance with the dioxins/furans emissions standard while co-firing coal with TDF in the cement kiln. The stack test shall consist of at least three, 3-hour test runs, and the sample volume for each run shall be at least 90 dscf. If a trial of TDF is not conducted, then permittee shall conduct the dioxins/furans stack test with the raw mill up on one of the other alternative fuels in this order: roofing shingles, clean woody biomass or carpet-derived fuel.

    c. *HCl Stack Tests*: In accordance with EPA Methods 26, 26A or 321, the permittee shall conduct separate stack tests with the raw mill up to determine the HCl emissions rate while co-firing coal with TDF in the cement kiln: The stack test shall consist of at least three, 1-hour test runs. If a trial of TDF is not conducted, then permittee shall conduct the HCl stack test with the raw mill up on one of the other alternative fuels in this order: roofing shingles, clean woody biomass or carpet-derived fuel.

    d. *Metals Stack Test*: In accordance with EPA Method 29, the permittee shall conduct two separate stack tests to determine total PM and the following metal emissions while co-firing coal with TDF: arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc. One stack test shall be conducted when the raw mill is up and one stack test when the raw mill is down. Each stack test shall consist of at least three, 1-hour test runs. During each test run, the permittee shall increase the TDF sampling frequency to one representative grab sample (approximately 1 gallon) every 15 minutes. The four grab samples collected during each test run shall be thoroughly mixed and a composite sample made (approximately 1 lb). Each composite sample representing the test run shall be analyzed for the following: heating value, moisture, density, volatiles, ash, sulfur, chlorine, fluorine and metals (including arsenic, barium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc). In addition, the permittee shall obtain a representative sample of the baghouse dust generated and the clinker produced during each test run and have it analyzed for the same metals. If a trial of TDF is not conducted, then permittee shall conduct two stack tests, one with the raw mill up and one with the raw mill down, for metals on one of the other alternative fuels in this order: roofing shingles, clean woody biomass or carpet-derived fuel.

    e. *Pesticides*: In accordance with Methods SW 0010/8270 (sampling method) and EPA SW-846 3500 or EPA 3550/8150 (analytical methods) for Semi-volatile Organics (including pesticides), the permittee shall conduct a stack test to determine the presence of pesticides in the exhaust while co-firing coal with non-chlorinated agricultural plastics. EPA Method SW-846 identifies using analytical method 8081. Other equivalent methods may be used with prior written approval of the Bureau of Air Regulation. The stack tests shall consist of at least three, 1-hour test runs. During each test run, the permittee shall

increase the sampling frequency of non-chlorinated agricultural plastics to one representative grab sample (approximately 1 gallon) every 15 minutes. The four grab samples collected during each test run shall be thoroughly mixed and a composite sample made (approximately 1 lb). Each composite sample representing the test run shall be analyzed for the following: heating value, moisture, density, volatiles, ash, sulfur, chlorine, fluorine and pesticides.

EPA Methods 1 – 4 shall be used as necessary to support the other test methods. [Rule 62-4.070(3), F.A.C.]

14. Test Requirements: Tests shall be conducted in accordance with the applicable requirements specified in Appendix C (Common Conditions) 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.]

15. Analytical Methods: The permittee shall use the following analytical methods to determine the composition of the alternative fuel materials.

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 ASTM D5468 - 02(2007) Standard Test Method for Gross Calorific and Ash Value of Waste Materials
Chlorine, Fluorine and Bromine	EPA SW-846 or EPA Method 9056
Mercury	EPA 7470A/7471A
Other Metals	EPA SW-846 or EPA Method 6010B
Pesticides	Sampling Methods: SW 0010/8270 or equivalent Analytical Methods: EPA SW-846 3500 or EPA 3550/8150 or equivalent method. EPA Method SW-846 identifies using analytical method 8081.

Other equivalent methods may be used with prior written approval of the Bureau of Air Regulation. [Rule 62-4.070(3), F.A.C.]

NOTIFICATIONS, RECORDS AND REPORTS

16. Notifications: Written notifications may be made by email, fax transmittal or letter.

    a. Within one day, the permittee shall notify the Compliance Authority of receiving the first shipment of each alternative fuel material. [Rule 62-4.070(3), F.A.C.]

    b. *Test Notifications*: The permittee shall notify the Department in writing, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the permittee. The Compliance Authority may waive the 15-day notice to facilitate testing. [Rule 62-297.310(7), F.A.C.]

17. Records: In addition to plant operation and production data, the permittee shall maintain records of the monitoring and emissions data required by the permit, including, but not limited to: the sampling and analysis procedures used; the analytical results of each alternative fuel materials; each fuel feed rate; the kiln production and process data; the emissions monitoring data; the baghouse inlet temperature; times, and any specific problems that occurred during the trial and the cause of the problem. [Rule 62-4.070(3), F.A.C.]

18. Trial Burn Summary Report: Within 90 days of completing each temporary trial of alternative fuel material,

the permittee shall submit a report to the Bureau of Air Regulation and the Compliance Authority summarizing: the sampling and analysis procedures used; the analytical results of the alternative fuel materials; a comparison of the heating value of each material determined by fuel analyses with that determined by the amount of coal displaced; the kiln production and process data; pre-calciner temperature; the emissions monitoring data (separated and compared for raw mill up and down conditions) in comparison to historical coal firing emissions; the baghouse inlet temperature; a conclusion as to the feasibility and practicality of firing the material as an alternative fuel; an estimate of the fuel costs that could be avoided by firing the material; the appropriate QA/QC procedures used to produce a high-quality alternative fuel (i.e., low in contaminants, high in heating value, free of scrap metals and properly sized); any specific problems that occurred during the trial and the cause of the problem; and problems with unloading storing or handling the material; problems with the material size and any re-processing conducted on site; recommendations to improve handling, storage and firing the alternative fuel material; and an assessment of the suitability of the material as a permanent alternative fuel for the plant. The report shall include a statistical analysis of the analytical data for the alternative fuel material and the emissions monitoring data. The report shall also include the comparison of the contaminants in and emissions of the alternative fuel material with the contaminants in and emissions from traditional fuels to meet the legitimacy criteria in 40 CFR 241.3(d)(1). [Rule 62-4.070(3), F.A.C.]