Florida Department of Environmental Protection

Memorandum

To: Jeff Koerner, Air Permitting and Compliance Section

From: Christy DeVore, Air Permitting and Compliance Section

Date: June 30, 2011

Subject: Draft Minor Source Air Construction Permit
Project No. 0530021-035-AC
Brooksville South Cement Plant
Revision to Miscellaneous Alternative Fuel Trials

Attached for your review is a draft minor air construction permit package for the existing Brooksville South Cement Plant which is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. Briefly, the draft permit revises Permit No. 0530021-031-AC, which currently authorizes short-term trial burns for: non-chlorinated plastics, tire-derived fuel, 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 permit adds engineered fuel. The amounts of each material are limited. Each trial is limited to no more than 90 operational days. The following emissions will be continuously monitored during each trial: carbon monoxide, nitrogen oxides, sulfur dioxide, total hydrocarbons and stack opacity. The plant must continue to comply with all emissions standards.

The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. The project includes a new source review reform review. Day 90 of the permitting time clock is August 24, 2011. I recommend your approval of the attached draft permit package.

Attachments

Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

June 30, 2011

Sent by Electronic Mail – Received Receipt Requested

Jim Daniel, Cement Plant Manager
CEMEX Construction Materials, LLC
10311 Cement Plant Road
Brooksville, Florida 34601

Re: Project No. 0530021-035-AC, Draft Permit
CEMEX Construction Materials, LLC, Brooksville South Cement Plant
Revisions to Alternative Fuel Trials, Kiln 2 System

Dear Mr. Daniel:

On May 26, 2011, you submitted an application to add engineered fuel to Permit No. 0530021-031-AC, which currently authorizes short-term trial burns for: non-chlorinated plastics, tire-derived fuel, 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. The existing facility is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. Enclosed are the following documents: the Written Notice of Intent to Issue Air Permit; the Public Notice of Intent to Issue Air Permit; the Technical Evaluation and Preliminary Determination; and the Draft Permit with Appendices. The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the project engineer, Christy DeVore, at 850/717-9085.

Sincerely,

Jeff Koerner, P.E., Program Administrator
Air Permitting and Compliance Section
Division of Air Resource Management

Enclosures

JFK/scd

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

CEMEX Construction Materials, LLC
10311 Cement Plant Road
Brooksville, Florida 34601

Authorized Representative:
Jim Daniel, Cement Plant Manager

Project No. 0530021-035-AC
Minor Air Construction Permit
Brooksville South Cement Plant
Revisions to Alternative Fuel Trials
Draft Permit
Hernando County, Florida

Facility Location: CEMEX Construction Materials, LLC operates the existing Brooksville South Cement Plant, located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida.

Project: This project revises Permit No. 0530021-031-AC, which currently authorizes temporary trials to co-fire coal with the following alternative fuel materials in the existing cement kiln (Kiln 2) to gather operational and emissions data: non-chlorinated plastics, tire-derived fuel, 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 project will add engineered fuel to the trials. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to

publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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 (in a proceeding initiated by another party) 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 Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency'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 agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority'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 the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Jeff Koerner, P.E., Program Administrator
Air Permitting and Compliance Section
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft 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 6/30/11 to the persons listed below.

Mr. Jim Daniel, Cement Plant Manager, CEMEX (jdaniel@cemexusa.com)
Mr. George Townsend, Environmental Manager, 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.

(Clerk) 6/30/11 (Date)

P.E. CERTIFICATION STATEMENT

PERMITTEE

CEMEX Construction Materials, LLC
10311 Cement Plant Road
Brooksville, Florida 34601

Draft Permit No. 0530021-035-AC
Revisions to Alternative Fuel Trials
Brooksville South Cement Plant
Hernando County, Florida

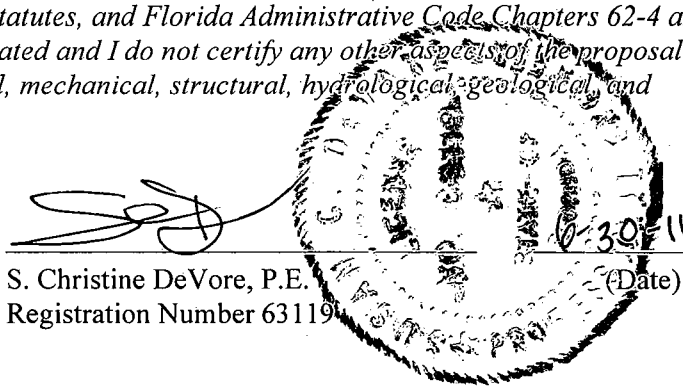
PROJECT DESCRIPTION

The permittee requests a revision to add engineered fuel to the fuel trials in Permit No. 0530021-031-AC, which currently authorizes short-term operational trials to co-fire coal in existing cement kiln (Kiln 2) to gather operational and emissions data: non-chlorinated plastics, tire-derived fuel, 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. Tire scraps and biomass, including agricultural byproduct, are defined as traditional fuels and not solid waste. The other alternative fuels meet the definition of industrial byproducts and are not defined as solid waste. The draft permit limits the amounts of each material and each trial is limited to no more than 90 operational days of firing the alternative fuel material. The following emissions will be continuously monitored during each trial: carbon monoxide, nitrogen oxides, sulfur dioxide, total hydrocarbons and stack opacity. The plant must continue to comply with all emissions standards in the current Title V air operation permit.

The revised draft permit limits the amounts of each material and each trial is limited to no more than 90 operational days of firing the alternative fuel material. The following emissions will be continuously monitored during each trial: carbon monoxide, nitrogen oxides, sulfur dioxide, total hydrocarbons and stack opacity. For the temporary trials stack testing was removed for D/F, HCl, metals, PM and pesticides because: D/F is controlled by long residence times at high temperatures followed by rapid cooling to inhibit reformation; HCl is removed by natural scrubbing of limestone in the kiln; sampling/analysis of metals input plus removal by baghouse and eventual reincorporation into the clinker; PM is controlled by the baghouse with relatively little additional dust loading from firing alternative fuels; initial analytical results for non-chlorinated plastics show very low levels of residual pesticides which will be readily destroyed in the high temperature combustion zones. The plant must continue to comply with all emissions standards in the current Title V air operation permit.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (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. The Department's full review of the project and rationale for issuing the draft permit is provided in the Technical Evaluation and Preliminary Determination.

I HEREBY CERTIFY *that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features).*



6-30-11

S. Christine DeVore, P.E. (Date)
Registration Number 63119

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Revised Draft Air Construction Permit
Project No. 0530021-035-AC
CEMEX Construction Materials, LLC, Brooksville South Cement Plant
Hernando County, Florida

Applicant: The applicant for this project is CEMEX Construction Materials, LLC. The applicant's authorized representative and mailing address is: Jim Daniel, Cement Plant Manager, CEMEX Construction Materials, LLC, Brooksville South Cement Plant, 10311 Cement Plant Road, Brooksville, Florida 34601.

Facility Location: CEMEX Construction Materials, LLC operates the existing Brooksville South Cement Plant, located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida.

Project: The applicant requests revisions to Permit No. 0530021-031-AC, which currently authorizes temporary short-term trials to co-fire coal with the following alternative fuel materials in the existing kiln to gather operational and emissions data in existing Kiln No. 2: non-chlorinated plastics, tire-derived fuel and tire fluff, manufacturer reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts (e.g., peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts and animal bedding), pre-consumer reject paper, carpet-derived fuel and on-specification used oil fuel that has been generated off-site. This project adds engineered fuel. The amounts of each material are limited. Each trial is limited to no more than 90 operational days. The following emissions will be continuously monitored during each trial: carbon monoxide, nitrogen oxides, sulfur dioxide, total hydrocarbons and stack opacity. The plant must continue to comply with all emissions standards.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Bureau of Air Regulation in the Department of Environmental Protection's Division of Air Resource Management. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the physical address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and information submitted by the applicant (exclusive of confidential records under Section 403.111, F.S.). Interested persons may contact the Permitting Authority's project engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site by entering draft permit number: http://www.dep.state.fl.us/air/emission/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of this Public Notice. Written comments must be received by the

Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 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 (in a proceeding initiated by another party) 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 Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency'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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority'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 the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

(Public Notice to be Published in the Newspaper)

TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

CEMEX Construction Materials Florida, LLC

Brooksville South Cement Plant
Facility ID No. 0530021
10311 Cement Plant Road
Brooksville, Florida

PROJECT

Project No. 0530021-035-AC, Revised Draft Permit
Temporary Trial of Multiple Alternative Fuels

COUNTY

Hernando County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section
2600 Blair Stone Road, MS#5505
Tallahassee, Florida 32399-2400

June 29, 2011

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

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

Facility Description and Location

CEMEX Construction Materials Florida, LLC operates an existing Portland cement manufacturing plant, which is collocated with an existing power plant. The cement plant is categorized under Standard Industrial Classification Code No. 3241. The power plant is categorized as SIC No. 4911 for electric power services. The Brooksville South Cement Plant and Central Power and Lime (CPL) Power Plant are 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 site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

Facility Regulatory Categories

- 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 major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Description of the Existing Pyroprocessing System

The cement plant consists of two Portland Cement lines (Lines 1 and 2) including associated kilns (Kilns 1 and 2) and clinker coolers (Coolers 1 and 2). Kiln 2 is a F.L. Smidth design with a dry preheater/precalciner kiln, a design which improves the thermal efficiency and production capacity by adding material feed separators (cyclone vessels) arranged vertically in a preheater tower before the kiln. Hot exhaust gas passes through the material feed separators in the preheater tower counter to the raw material flow, which provides heat transfer between the gas and solid streams. The improved heat transfer allows the kiln length to be reduced as well as dry the raw materials in the raw mill.

Coal and petroleum coke are burned in the precalciner combustion chamber at the inlet to the kiln as well as at the main burner at the discharge end of the kiln. Temperatures reach approximately 3000° F in the main burner

flame, 2200° F in the kiln and 1800° F in the calciner. The following schematic represents the conditions of a modern preheater/pre-calciner kiln.

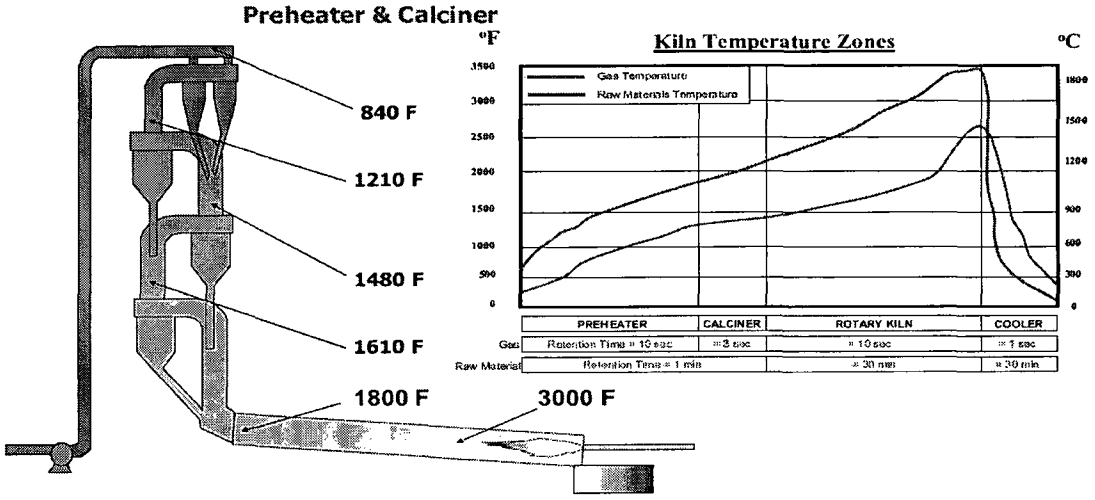


Figure 1. Kiln Temperatures and Retention Times

As shown, gas temperatures in the calciner are approximately 1800° F with a 3 second retention time. Gas temperatures at the inlet to the kiln exceed 2000° F. The high temperatures and long retention times provide excellent combustion of fuels. Figure 2 is a process flow diagram for a dry process preheater/pre-calciner cement plant.

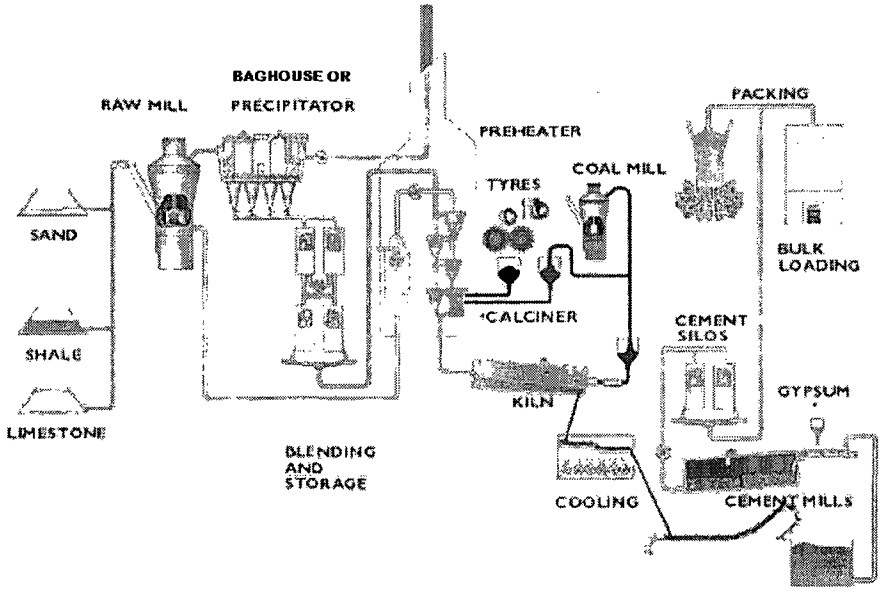


Figure 2. Process Flow Diagram - Dry Process Preheater/Precalciner Cement Plant [1]

As shown, an induced draft fan pulls hot exhaust gases from the kiln through the preheater tower, the raw mill, a baghouse and out the stack. Raw materials (limestone, sand and iron ore) are fed into the raw mill, which grinds and mixes the raw materials to form raw meal. Instead of the typical practice for an in-line vertical raw mill, the F.L. Smidth design incorporates a ball mill for the raw mill that has several benefits including assistance (by generated friction heat) in drying of the raw materials. Raw meal is transferred to the raw meal storage silo

[1] From the Department's Project No. 1210465-004-AC; Originally from Blue Circle Home Page at http:/www.cement.bluecircle.co.uk; Teleconference between A.A. Linero (Florida DEP) and W. McLendon (Blue Circle) with permission to use modified version of Blue Circle cement process diagram; March 19, 2001.

countercurrent to the hot exhaust gas, which is used to dry the raw meal. Raw meal is fed into the preheater tower, where the solid materials again flow countercurrent to the hot exhaust gas, which preheats the raw meal before being introduced to the pyroprocessing kiln. Instead of the typical practice using a ball mill for product cement grinding at the finish mill, this F.L. Smidth design incorporates a vertical mill for the finish mill that has some process benefits, but which (at times) requires use of a heater to assist in driving off moisture (from ambient air) from the finished cement prior to storage and shipping. For that heating, there is a small 45 million Btu per hour (Btu/hr) propane/diesel-fueled dryer within the cement finish mill. The kiln transforms the raw meal into cement clinker, which is cooled and eventually ground to size in the finish mill with other additives to form the final cement product. Kiln 2 and Clinker Cooler 2 exhaust gases prior to exiting via the common stack.

For the Brooksville South Cement Plant, particulate matter from the kiln and the raw mill are controlled by the baghouse and not the electrostatic precipitator shown in the above figure. Dust collected in the baghouse is diverted to the raw meal storage silo since this material is basically raw meal. This type of pyroprocessing system eliminates cement kiln dust (CKD), which used to be handled as a waste product. When the raw mill is off line, the raw meal silo contains enough raw meal to continue operating the kiln for approximately two days until the raw mill is brought back on line.

Emissions of nitrogen oxides are controlled by adjustments to the multistage combustion system timing, fuel input rates and a selective non-catalytic reduction (SNCR) system. Emissions of nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO) and total hydrocarbons (THC) are monitored with certified continuous emissions monitoring systems (CEMS). Stack opacity is monitored with a certified continuous opacity monitoring system (COMS).

Temporary Short-Term Trials of Multiple Alternative Fuels

On May 5, 2011, the Department issued Permit No. 0530021-031-AC, which authorized short-term operational trials to co-fire coal in existing Kiln No. 2 with the following materials: non-chlorinated plastics, tire-derived fuel including tire fluff, manufacturer reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts (e.g., peanut hulls, rice hulls, corn husks, citrus peels, cotton gin byproducts and animal bedding), pre-consumer reject paper, carpet derived fuel and on-specification (on-spec) oil generated off-site. See the Technical Evaluation and Preliminary Determination for this project.

On May 26, 2011, the permittee requested a modification to:

- Add 11,500 tons engineered fuel to the trial of alternative fuels.
- Remove fluorine analysis;
- Remove the requirement to report fuel costs; and
- Remove the requirement to report a comparison per the legitimacy requirement.

Engineered Fuel: This material consists of a blend of the above materials along with other known sorted and processed non-hazardous materials. No more than 11,500 tons shall be fired in the kiln.

Summary of Expected Emissions

In Table C, the applicant estimates emissions changes expected from firing the alternative fuel materials compared to an equivalent amount of displaced coal.

	SO_2	NO_x	CO	VOC	PM/PM10	PM2.5[a]	Pb	Hg
	Inc./Dec.	Inc./Dec.	Inc./Dec.	Inc./Dec.	Inc./Dec.	Inc./Dec.	Inc./Dec.	Inc./Dec.
	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(lbs)	(lbs)
Fugitives	revised below	revised below	revised below	revised below	revised below	revised below	revised below	revised below
Non-Chlorinated Plastic	0.00	0.00	0.00	0.00	0.00	0.00	-5.78	-1.47
Agricultural Waste	0.69	-2.84	8.19	0.76	2.75	1.37	-10.82	-1.20
Carpet-Derived Fuel	0.00	0.00	0.00	0.00	0.00	0.00	9.92	2.52
Clean Woody Biomass	1.20	-4.92	14.20	1.32	4.77	2.38	-18.99	-4.05
Manufacturer Reject Roofing Shingles	0.18	-20.01	0.00	1.03	0.00	0.00	20.55	-3.25
Preconsumer Paper	0.75	-3.08	8.87	0.82	2.98	1.49	-3.43	-2.93
Tire Derived Fuel	-0.08	-3.87	22.77	-0.08	-0.24	-0.12	-0.74	-5.76
On-Spec Used Oil	11.94	-2.07	-2.24	9.64	0.80	0.40	5.20	-0.71
MODIFICATION TO INCLUDE ENGINEERED FUEL								
Fugitives	1.02	3.33	3.88	3.33	2.13	1.07	0.0	0.0
Engineered Fuel	-0.08	0.66	-0.38	0.08	-0.38	-0.19	0.00	2.51
Total	15.64	-32.80	55.30	16.90	12.80	6.40	-4.10	-14.33
PSD Threshold	40	40	100	40	25/15	10	1200	permit: 122 lb/yr
a. PM2.5 from Fugitives. PM2.5 from alternative fuel firing conservatively estimated at 50% of fraction of PM.								

Table C. Emissions Increases for Alternative Fuel Materials

It is noted that the current PSD threshold for mercury is 200 lb; however this facility has a permitted limit of 122 lb/year. As shown, the applicant predicts that the project will not result in significant emissions increases subject to PSD preconstruction review.

During the trial period, the applicant proposes to conduct the short-term trials using the following procedures.

1. NO_X, SO_2, CO and THC emissions will be continuously monitored with the existing certified CEMS.
2. Opacity will be continuously monitored with the existing certified COMS.
3. Mercury emissions will be monitored based on a mass-balance calculation.
4. Each alternative fuel will be co-fired with coal in the cement kiln at low, medium and high feed rates to determine the maximum feed rate and best operational feed rate.
5. No more than 3,000 tons of non-chlorinated plastics, 4,500 tons of tire derived fuel, 10,000 tons of manufacturer reject shingles, 10,000 tons of clean woody biomass, 20,000 tons of agricultural byproducts, 5,000 tons of pre-consumer paper, 6,500 tons of carpet derived fuel, 400 tons of on-spec used oil generated off-site and 11,500 tons of engineered fuel will be fired over a period of 90 operating days for each fuel. No more than 5,000 tons of agricultural byproducts will be stored on site at one time.
6. It is estimated that material suppliers will deliver approximately 3,545 truckloads of alternative fuels to the Brooksville South Cement Plant during this trial assuming 20 tons per truck.
7. The Brooksville South Cement Plant will sample and analyze each material for the following:
   a. *All Materials*: heating value, moisture content, density, volatiles, ash, sulfur, chlorine and mercury.
   b. *Non-Chlorinated Agricultural Plastics*: pesticides.
   c. *TDF, Reject Roofing Shingles, Clean Woody Biomass and Engineered Fuel*: arsenic, cadmium, chromium, copper and lead.

8. The alternative fuels will be delivered in a covered truck, 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 and visibly marked. Alternative fuel materials delivered to the site shall be burned in the kiln during the 90-day trial or removed from the site within 30 days of completing the trial. A water spray system will be used to control fugitive dust as necessary; otherwise, the materials shall be kept dry to facilitate burning.
9. The permittee will submit a report to the Department summarizing and discussing the short-term trial of each alternative fuel and the actual emissions.

The results of the short-term trial may be used to support a subsequent request for permanent authorization to fire one or more of these alternative fuels or authorization for a long-term trial.

2. PSD APPLICABILITY

General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. An existing, new or modified facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the listed 28 PSD-major facility categories (which include Portland cement plants).

The regulated PSD pollutants include: carbon monoxide (CO); nitrogen oxides (NO_X); sulfur dioxide (SO_2); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM_{10}); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H_2S); total reduced sulfur (TRS) including H_2S; reduced sulfur compounds including H_2S; and mercury (Hg). There are additional PSD pollutants specific to municipal waste combustors and landfills.

A PSD applicability review is required for all projects at new and existing major and minor stationary sources. Once it is determined that the existing facility is, or that the new or modified facility will be, a major stationary source, the project emissions increases are then compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the PSD pollutants. If the potential emissions increase exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant. Also, note that significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 $\mu g/m^3$, 24-hour average. For each significant PSD pollutant, the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be "significant" for several PSD pollutants.

PSD Applicability for Project

As previously shown in Table C, the applicant expects that co-firing coal with alternative fuel materials will result in negligible changes in PSD pollutant emissions for the following reasons.

- CO and VOC emissions will be controlled by the high temperatures and long residence time in the calciner (1600 to 1800° F for 3 seconds), which was specifically designed with a separate calciner chamber for firing alternative fuels. CO will be monitored continuously by certified CEMS and THC will be monitored continuously with a certified CEMS as a surrogate for VOC emissions.
- NO_X emissions will be controlled with the existing SNCR system by adjusting the ammonia injection rate as necessary. NO_X emissions will be continuously monitored by certified CEMS.

- Particulate matter will be controlled with the existing baghouse. The combustion of alternative fuel materials is not expected to generate substantially more particulate matter than coal combustion considering the largest portion of particles removed by the baghouse are raw materials used in making cement.
- SO_2, HCl and other acid gas emissions increases will be negligible because of the natural scrubbing with highly alkaline limestone as a raw material in the cement kiln.
- Based on previous studies for this industry, more than 99.7% of the lead will be captured and bound in the cement clinker and retained in the final cement product. Other metal emissions are expected to be negligible from firing the requested alternative fuels. Most of these materials do not normally contain metals. For the engineered fuel, metals are recovered by the supplier as a valuable commodity. Metals that do enter the calciner would be removed in the baghouse dust, which is recirculated to the preheater tower as feed. Tests on similar kilns indicate that semi-volatile and non-volatile metals are eventually incorporated into the clinker. Only mercury, a highly volatile metal is expected to be emitted. For mercury, the plant is required to conduct a material balance on all of the raw materials and fuels to demonstrate compliance with the mercury limit.
- Dioxin/Furan emissions will continue to be destroyed by the long residence times at high temperatures in the kiln (~10 seconds at 2,800°F) and calciner (~3seconds at 1,800°F) and inhibited from reforming by rapid gas cooling in the preheater tower. The baghouse inlet temperature will be continuously monitored to ensure effective D/F control.

Total project emissions are not expected to exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review. The project is for short-term (90 days) trials of alternative fuels on a temporary basis. Once the trial ends, the alternative materials can no longer be fired. The purpose of each trial is to gather information on the feasibility and in support of a permanent request. At that time, the Department will require a comparison of projected actual emissions to baseline actual emissions to determine PSD applicability with the selected alternative fuel materials.

3. DEPARTMENT REVIEW

Operating Capacity and Production

According to the Portland Cement Association, cement production in Florida was more than 12 million tons in 2006 and has dropped each year to a low of just over 4 million tons in 2009. In addition to preventing the construction of several of the new kilns, this situation has caused the shutdown of recently constructed and existing kilns. The Brooksville South Cement Plant's construction permit for Kiln 2 was issued July 6, 2005 and has a maximum permitted Portland cement production capacity of 1,022,000 tons of clinker per year. Florida's cement production peaked in 2007, but dropped in 2008 and then dropped again in 2009 with the downturn in the economy. Currently, the Brooksville South Cement Plant operates Kiln 2, but not Kiln 1 due to the decreased demand.

In response to the economic downturn, the Brooksville South Cement Plant is seeking to develop alternative fuel materials that will displace coal and fly ash to be more environmentally green, lower operating costs and eventually reduce mercury and other pollutants emissions as well as aid in complying with newly proposed regulations.

The alternative materials will be supplied by pneumatic injection into the pyroprocessing system by a temporary feeding system at the base of the precalciner tower. Alternative materials are blown pneumatically into the pre-calciner through an injection porthole.

Summary of Cement Kiln Emissions

Other applicants requesting to use alternative fuels in kilns have submitted data regarding the use of alternative fuels in Europe. The European Commission created a summary report[2] of the emissions data from cement kilns in over 23 European countries. The report provides summaries of the relative emissions differences from firing a broad range of alternative fuels at replacement rates of greater than 40 percent heat input to the kiln. A review of the summaries is in the table below.

Table 3. European Kilns Pollutant Emissions

Pollutant	0% Substitution	40 % Substitution	Change in Emissions
PM	0.0183 gr/dscf	0.0091 gr/dscf	50% decrease
SO_2	80.6 ppm	62.8 ppm	22% decrease
NO_X	499.9 ppm	283.9 ppm	43% decrease
TOC	16.7ppm	14.7 ppm	12% decrease

Note: About 90% of the kilns represented in the summaries are dry process kilns with most re-circulating the dust collected by the control equipment similar to the Branford cement kiln.

In addition, a study[3] supported by the CEMA FOUNDATION (Spanish Cement Association (OFICEMEN) and the two main trade unions in Spain (FECOMA-CCOO and MCA-UGT)) examined cement kiln emissions and the possible health effects on people living near cement plants. After analyzing the risk indices related to the receptors living close to the cement plants, focusing on the exposure by inhalation and ingestion of the soil and fruit and vegetables growth around the studied area, the results demonstrated that there is no significant health risk. Other studies support these findings, for example, the United Kingdom Public Health Agency stated, "There will consequently be little change in the pollution levels in the air that people breathe as this is largely determined by other sources such as traffic. We are unaware of any evidence that burning substitute fuel (in cement kilns) has caused adverse health effects."[4]

Applicability of Federal Regulations for Portland Cement Plants

NSPS Subpart F in 40 CFR 60 - Portland Cement Plants

This federal regulation applies to all Portland cement plants constructed, reconstructed or modified after August 17, 1971. Except as provided in paragraphs 40 CFR 63.1356(a)(1) and (a)(2), any affected source subject to the provisions of Subpart LLL in 40 CFR 63 (MACT for Portland Cement Plants) is exempt from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart F. The Branford Cement Plan is subject to NESHAP Subpart LLL.

NSPS Subpart Eb – Large Municipal Waste Combustors

This federal regulation applies to municipal waste combustors for which construction is commenced after September 20, 1994 or for which modification or reconstruction is commenced after June 19, 1996. This regulation could apply to cement kilns or boilers firing certain non-traditional solid fuels defined as municipal solid waste. However, 40 CFR 60.50b(p) of this regulation specifically states that, "Cement kilns firing municipal solid waste are not subject to this subpart."

NSPS Subpart CCCC Commercial and Industrial Solid Waste Incineration (CISWI) Units

First promulgated on December 1, 2000, this federal regulation applies to municipal waste combustors for which construction is commenced after November 30, 1999 or for which modification or reconstruction is commenced on or after June 1, 2001. This regulation could apply to cement kilns or boilers firing certain non-traditional solid

[2] Cement, Lime and Magnesium Oxide Manufacturing Facilities, May 2010, Tables 1.24, 1.32,1.25, 1.38, http://eippcb.jrc.ec.europa.eu

[3] "Emissions and their Possible Environmental and Health in the Surroundings of Cement Plants, Effects", URS Espana

[4] http://www.dh.gov.uk/ab/COMEAP/DH_108498

fuels defined as municipal solid waste. However, as promulgated in 2000, 40 CFR 60.2020(l) specifically provides that cement kilns regulated under NESHAP Subpart LLL in 40 CFR 63 (MACT for Portland Cement Plants) are exempt from compliance with the CISWI rules under NSPS Subpart CCCC. The Branford Cement Plan is subject to NESHAP Subpart LLL.

On March 21, 2011, EPA revised NSPS Subpart CCCC and the new Subpart CCCC requirements became effective on May 20, 2011. However, the 2011 version applies only to new, modified or reconstructed units, which are defined as units constructed after June 2010. EPA's preamble specifically provides that only "incinerators" and "small remote incinerators" remain subject to the standards in the 2000 NSPS Subpart CCCC rules. EPA also states that CISWI units falling within other subcategories, including cement kilns, "... will not in any case ..." be subject to the 2000 NSPS Subpart CCCC standards.

Also, in the 2011 version of NSPS Subpart CCCC, new, modified, reconstructed cement kilns will not be exempt from the new CISWI rules. Paragraph (l) of 40 CFR 60.2020 that established the exemption from NSPS Subpart CCCC is now marked "reserved." Waste-burning cement kilns constructed prior to June 4, 2010 are not considered to be "new" units subject to the 2011 NSPS Subpart CCCC standards *unless they are subsequently modified or reconstructed.* However, as described below, EPA also promulgated new solid waste definitions to clarify that some solid waste materials may be processed to qualify as legitimate alternative fuels and ingredients, which would not subject the cement kiln to NSPS Subpart CCCC.

NSPS Subpart DDDD - Emissions Guidelines and Compliance Times for CISWI Units

This federal regulation establishes "emission guidelines" and compliance schedules for the control of emissions from existing CISWI units. This NSPS does not establish standards that apply directly to emission units because the NSPS standards are developed to apply to new units. The emissions guidelines are established for states to develop rules that regulate emissions from existing CISWI units. The 2000 version of Subpart DDDD specifically exempts cement kilns.

Under the 2011 version of Subpart DDDD, waste-burning cement kilns that were constructed after November 30, 1999, and before June 4, 2010, will be required to comply with the standards and requirements for "existing units" established under the emissions guidelines as implemented by the state. The rules require state plans to be submitted by March 21, 2012 for CISWI units other than incinerator units (e.g., waste-burning kilns) that commenced construction on or before June 4, 2010. The compliance deadline is three years after the effective date of EPA's approval of the state plan, but no later than March 21, 2016. Florida has not yet incorporated the revised emissions guidelines into its rules. For these waste-burning kilns, the standards in Table 8 of Subpart DDDD will apply once Florida adopts the rule and puts in place the approved plan or delegation. Currently, there is no mechanism for applicability of the 2011 version of Subpart DDDD in Florida for waste-burning kilns or a deadline for compliance with the applicable requirements under Subpart DDDD for waste-burning kilns. These issued must be resolved when Florida completes rulemaking to implement the 2011 version of Subpart DDDD through a state plan approved by EPA or direct delegation from EPA.

Vacatur of the CISWI Definitions Rule

A federal Court vacated EPA's CISWI Definitions Rule and remanded it to EPA for new rulemaking that would identify which secondary materials are nonhazardous ''solid waste'' for purposes of subtitle D (non-hazardous waste) of the RCRA when burned in a combustion unit. See *Federal Register Volume 75, No. 174, Thursday, September 9, 2010, Rules and Regulations and Volume 75, Page 31844, June 4, 2010.*

The revised definitions will determine the applicability of Clean Air Act (CAA) Section 129(a) for any combustion unit that burns any non-hazardous secondary material that is considered to be a solid waste. When EPA developed the NSPS Subpart CCCC and Emissions Guidelines Subpart DDDD provisions, there was no Federal regulatory interpretation of "solid waste" for EPA to apply under Subtitle D of RCRA for purposes of CAA section 112 and 129. During the NSOS rulemaking, EPA did not prejudge the outcome of the recently proposed non-hazardous solid waste rulemaking. EPA therefore did not determine whether or not non-hazardous secondary materials combusted by cement kilns were to be classified as solid wastes. Accordingly, EPA based all

NSPS determinations as to source classification on the emissions information that was available at that time, as required by CAA section 112(d)(3). Therefore, the current data base classifies all Portland cement kilns as CAA section 112 sources (*i.e.*, subject regulation under CAA section 112) regardless of the fuel current being fired.

40 CFR 241 - Non-Hazardous Discarded Materials That Are Solid Waste When Used as a Fuel or Ingredient

When EPA updated the CISWI rules (NSPS Subpart CCCC provisions and the Emission Guidelines in Subpart DDDD), it also changed the definition of solid waste used in the rules to conform with the definition of solid waste under the Resource Conservation and Recovery Act (RCRA), "... any distinct operating unit of any commercial or industrial facility that combusts any solid waste as that term is defined in 40 CFR Part 241 [RCRA]..." In 40 CFR 241.3(b), the new RCRA definitions specify that the following non-hazardous secondary materials *are not* solid wastes when combusted:

- Non-hazardous secondary materials used as a fuel in a combustion unit that remain within the control of the generator and that meet the legitimacy criteria specified in paragraph (d)(1) of this section.
- The following non-hazardous secondary materials that *have not been discarded and* meet the legitimacy criteria specified in paragraph (d)(1) of this section when used in a combustion unit (by the generator or outside the control of the generator):
  - Scrap tires used in a combustion unit that are removed from vehicles and managed under the oversight of established tire collection programs.
  - Resinated wood used in a combustion unit (Resinated wood means wood products containing resin adhesives derived from primary and secondary wood products manufacturing such as items as board trim, sander dust, and panel trim).

The "legitimacy criteria" for non-hazardous secondary materials:

- The non-hazardous secondary material must be managed as a valuable commodity based on the following factors:
  - The storage of the non-hazardous secondary material prior to use must not exceed reasonable time frames;
  - Where there is an analogous fuel, the non-hazardous secondary material must be managed in a manner consistent with the analogous fuel or otherwise be adequately contained to prevent releases to the environment;
  - If there is no analogous fuel, the non-hazardous secondary material must be adequately contained so as to prevent releases to the environment;
- The non-hazardous secondary material must have a meaningful heating value and be used as a fuel in a combustion unit that recovers energy.
- The non-hazardous secondary material must contain contaminants at levels comparable in concentration to or lower than those in traditional fuels which the combustion unit is designed to burn. Such comparison is to be based on a direct comparison of the contaminant levels in the non-hazardous secondary material to the traditional fuel itself.

Although the Florida has not yet adopted these federal definitions, the alternative fuels requested by SAC appear to meet the legitimacy criteria by being managed as a valuable commodity (i.e., fuel), having a useful heating value (displaces coal as a pre-calciner fuel) and containing contaminants comparable to traditional fuels (e.g., coal).

Reconsideration Action on Cement NESHAP (Excerpts)

When EPA proposed the revised Portland Cement NESHAP, it classified all cement kilns, including those burning secondary materials, as "cement kilns" for the NESHAP rulemaking, and explained why it was doing so.

The EPA discussed the interplay between the cement kiln NESHAP and the forthcoming rules for incinerators which burn solid waste, noting that "some Portland cement kilns combust secondary materials as alternative fuels" *(74 FR at 21138)*. The EPA then stated that because there was no regulatory definition of solid waste that would distinguish which of these alternative fuels burned by cement kilns were wastes and which were not, the EPA would therefore classify all of the units as cement kilns. *Id.* The EPA reasoned that unless and until the Agency adopts a definition of solid waste classifying the alternative fuels, cement kilns burning secondary materials as fuels or otherwise using secondary materials are lawfully classified as cement kilns and rules for cement kilns therefore would apply to them.

The EPA further found that combustion of secondary materials as alternative fuels by cement kilns "did not have any appreciable effect on the amount of hazardous air pollutants (HAP) emitted by any source." *Id.* The record for the proposed rule included an inventory of every material burned by a large group of cement kilns over a 30-day period, including all of those comprising the pool of best performers for mercury.

A "secondary material" is a material that can potentially be classified as a solid waste under RCRA when recycled *(50 FR 616 n. 4 (Jan. 4, 1985)*. Under the newly adopted regulatory definition of solid waste, secondary materials encompass "any material that is not the primary product of a manufacturing or commercial process, and can include post-consumer material, off-specification commercial chemical products or manufacturing chemical intermediates, post-industrial material, and scrap *(40 CFR section 241.2)*.

As noted earlier, all cement kilns certified to EPA that they were cement kilns in compliance with the applicable section 112 (d) standards for cement kilns up to and through the time of the amendments to the Portland Cement NESHAP. Thus, cement kilns burning alternative fuels or other secondary materials were not classified as incinerators during the cement NESHAP rulemaking, but as cement kilns. Therefore, the Portland Cement NESHAP was, and is, based exclusively on the performance of cement kilns, as properly classified at the time of the rulemaking.

NESHAP Subpart LLL in 40 CFR 63 - Portland Cement Manufacturing Industry

This federal MACT applies to all new and existing Portland cement plants at major and area sources. The affected source includes the kiln, which is defined as a device that includes the preheater tower, precalciner and raw mill. The Branford Cement Plant is subject NESHAP Subpart LLL (Portland Cement MACT), which is adopted by reference into Rule 62-204.800, F.A.C. By being subject to Subpart LLL, the kiln is specifically exempt from compliance with the requirements of NSPS Subpart F, Standards of Performance for Portland Cement Plants, in 40 CFR 60.60 – 60.66.

In 2010, EPA revised this federal rule for which the revisions will take effect in 2013. The Portland Cement MACT establishes emission standards that must be met and does not limit the types of non-hazardous materials that can be used as fuels or ingredients in the kiln. It does not prohibit the use of non-hazardous discarded materials, municipal solid waste, refuse-derived waste, or any other form of solid waste as a fuel. The MACT standards specify the following HAP emissions standards applicable to the Branford Cement Plant:

- Mercury: 55 lb/million tons of clinker produced
- PM: 0.04 lb/ton clinker(as a surrogate for metals such as cadmium and lead)
- THC: 24 ppmv (as a surrogate for other organic HAP emissions)
- HCl: 3 ppmv

Compliance with the new standards requires continuous monitoring methods. Although this NESHAP is final, EPA is currently reconsidering portions and it will likely be challenged by industry as well as environmental groups.

Identification of Non-Hazardous Materials That Are Not Solid Waste – State Regulations

According to 403.7045(1)(f), F.S., the following are considered "industrial byproducts" and not solid wastes, if:

- A majority of the industrial byproducts are demonstrated to be sold, used, or reused within one year.

- The industrial byproducts are not discharged, deposited, injected, dumped, spilled, leaked, or placed upon any land or water so that such industrial byproducts, or any constituent thereof, may enter other lands or be emitted into the air or discharged into any waters, including groundwater, or otherwise enter the environment such that a threat of contamination in excess of applicable department standards and criteria or a significant threat to public health is caused.
- The industrial byproducts are not hazardous wastes as defined under 403.703, F.S. and rules adopted under this section.

Based on this rationale, the proposed alternative fuel materials are industrial byproducts or have specific exemptions from solid waste permitting. Non-chlorinated plastics and agricultural fibrous organic byproducts have agricultural exemptions from solid waste rules. Reject roofing shingles and used roofing shingle scraps include raw material needed by the cement kiln. Tire-derived fuel has exemptions from solid waste permitting. Clean woody biomass is exempt from solid waste permitting. Pre-consumer reject paper, post-consumer paper carpet-derived fuel, a blended mix of the above alternative fuels and an engineered fuel are considered industrial byproducts, which are not solid wastes.

Removing Test Requirements

- The requirement for metals stack testing was removed because current information indicates that metals in the alternative fuels will be comparable to or less than coal.
- The analytical data obtained from the samples of non-chlorinated agricultural plastics show no detectable pesticides or very low levels. This is likely because newer pesticides are biodegradable and quickly break down after use. The long residence time at high temperatures will destroy any pesticide residue. Due to the very low levels present, the requirement for stack testing was removed.
- The permit initially required HCL and D/F testing if the chlorine content of the alternative fuels was more than 0.2%, but there is additional information supporting the effective scrubbing of HCl emissions by the limestone and that D/F are be destroyed high temperatures above 1400° F and are not reformed if rapidly cooled and maintained below 400° F [5]. A study, Air Emissions Data Summary for Portland Cement Pyroprocessing Operations, Portland Cement Association, 2008[6], shows D/F emissions are related to the type of kiln. In response to the 2002 MACT standards, the cement kilns conducted D/F emission tests, and many kiln operators learned to reduce the inlet temperature to the air pollution control systems to suppress formation of D/F compounds. Due to this change in operating conditions, D/F emissions in the cement industry have decreased significantly since the 2002 compliance date of the MACT standard for kilns subject to Subpart LLL. The preheater/precalciner kiln design for SAC provides this cooling and the plant continuously monitors the temperature to the baghouse inlet as an indicator of effective D/F control.

4. CONCLUSION

The short-term trial burns will allow the development of QA/QC procedures to determine whether it is feasible for the plant to handle and fire each material. The alternative fuels are limited in amounts and each will be fired over a maximum of 90 operational days. Actual emissions from firing the alternative fuels are not expected to increase significantly above the baseline emissions. The applicant will be required to comply with all existing valid permit conditions. The Brooksville South Cement Plant is currently in compliance with the terms and conditions of its Title V air operation permit. As previously mentioned, the plant resolved the mercury issue at Kiln 2 by implementing a dust shuttling program to retain mercury captured in the baghouse dust by adding it to the final cement product.

---

[5] EPA Course No. Re-100, "Basic Concepts in Environmental Sciences"; Module 6: Air Pollutants and Control Techniques - Dioxins and Furans; http://www.epa.gov/apti/bces/index.htm.

[6] "Air Emissions Data Summary for Portland Cement Pyroprocessing Operations", Richards, John; Goshaw, David; and Holder, Tom, Portland Cement Association, PCD R&D SN3048, 2008.

Table G. Emissions Standards in the Title V Air Operation Permit for the Brooksville South Cement Plant Kiln 2.

Pollutant	Emission Limit		Averaging Time	Basis
PM	0.136 lb/ton of dry preheater feed; 0.23lb/ton of clinker	28.8 lb/hr	3 hours [3]	BACT
PM_{10}	0.118 lb/ton of dry preheater feed; 0.20 lb/ton of clinker	25.0 lb/hr	3 hours [3]	BACT
SO_2	0.23 lb/ton of clinker	28.8 lb/hour	24 hours [4]	BACT
NO_X	1.95 lb/ton of clinker [1]	243.75 lb/hour [1]	30 days	BACT
CO	3.6 lb/ton of clinker	450.0 lb/hour	24 hours [5]	BACT
VOC	0.12 lb/ton of clinker [2]	15.0 lb/hour [2]	30 days [6]	BACT
VE	10% opacity	---	6 minutes [7]	BACT
Mercury	41 µg/dscm[8]	--		Subpart LLL[8]
	---	122 lb/yr	Annual	Avoid PSD

[1] NO_X emissions shall not exceed 2.4 lb/ton of clinker and 306.25 lb/hour (30 day rolling average) during the first 180 operating days after initial startup. After the 180 operating days after initial plant startup, emissions of NO_X shall not exceed the limits shown in the table.

[2] VOC emissions shall be expressed as propane.

[3] The averaging times for PM and PM_{10} correspond to the required length of sampling for the initial and subsequent emission tests.

[4] The averaging time for SO_2 shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

[5] The CO emissions limit will have a 30-day averaging period for the first 180 days after initial startup; thereafter, the CO limits will be a 24-hour limit. The averaging time for CO shall be a rolling average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours.

[6] The averaging time for VOC shall be a 30-day block average specified in 40 CFR 63.1350(h).

[7] The averaging time for visible emissions shall be a 6-minute block average that shall be computed from a minimum of one measurement every 15 seconds. The 6 minute block averages shall start at the beginning of each hour.

[8] Micrograms per dry standard cubic meter (µg/dscm) per 76518 Federal Register / Vol. 71, No. 244 / Wednesday, December 20, 2006 / Rules and Regulations. "As an alternative to meeting the 41 µg/dscm standard you (the operator) may route the emissions through a packed bed or spray tower wet scrubber with a liquid-to-gas ratio of 30 gallons per 1000 actual cubic feet per minute or more and meet a site-specific emissions limit based on the measured performance of the wet scrubber".

These emission limits, along with annual production limits, effectively limit annual emissions to: PM, 117.6; PM_{10}, 102.3; SO_2, 117.6; NO_X, 996.7 (after 180 days); CO, 1,840 (including 30-day average for first 180 days); and VOC, 61.3 tons per year. First year NO_X emissions are effectively limited to 1,595.4 tons per year. These emission limits are based on 2,800 tons per day and 1,022,000 tons per year of clinker production.

Based on reasonable assurance provided by the applicant, the project:

- Will not result in significant emissions increases requiring PSD preconstruction review, and
- Will not violate the terms and conditions of the current Title V air operation permit.

A draft permit will be issued to authorize and regulate the short-term trials of alternative fuel materials.

5. CHANGES MADE TO PERMIT NO. 0530021-031-AC

On May 26, 2011, the Department received a request for a modification from the applicant to modify Permit No. 0530021-031-AC. The following summarizes the requests and the Department's response.

1. The applicant requested the addition of engineered fuel to the list of alternative fuels for the trial burn.
   Response: The engineered fuel has been added to the list of alternative fuels approved for the trial burn.

2. The applicant requested the removal of fluorine analysis from the material sampling requirements.

   Response: Fluorine concentrations in the alternative fuel materials are expected to be low and will be well controlled by the alkaline environment of the preheater/precalciner and cement kiln. Fluorine has been removed from sampling/analysis.

3. The applicant requested the removal of the requirement to report fuel costs.

   Response: This requirement has been removed due to the request for confidentiality.

4. The applicant requested to remove the requirement to report a comparison per the legitimacy criteria in 40 CFR 241.3(d)(1).

   Response: The requirement for the comparison to the legitimacy criteria has been removed; however, the information is still reported.

6. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Christy DeVore, project engineer, and Jeff Koerner, program administrator, jointly reviewed the application and prepared the draft permit documents. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

DRAFT PERMIT

PERMITTEE

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

Authorized Representative:
Jim Daniel, Cement Plant Manager

Air Permit No. 0530021-035-AC
Modification of Air Permit No. 0530021-031-AC
Permit Expires: July 31, 2014
Brooksville South Cement Plant
Temporary Trials of Alternative Fuels
Revisions

PROJECT

CEMEX Construction Materials Florida, LLC operates an existing Portland cement manufacturing plant, which is categorized under Standard Industrial Classification Code No. 3241. The Brooksville South Cement Plant and Central Power and Lime (CPL) Power Plant are collocated in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. The UTM coordinates of the existing facility are Zone 17, 360.0 kilometers East, and 3162.5 kilometers 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 plastics, tire-derived fuel including tire fluff, reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts, pre-consumer reject paper, carpet-derived fuel, on-specification used oil generated off-site and engineered fuel. 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

_____ _____
(Signature) (Date)

_____
(Printed Name of Above Designee)

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 _____ 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. Nitrogen oxides (NO_X) emissions are controlled by the use of Selective Non-catalytic Reduction (SNCR) technology. Sulfur dioxide (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. Carbon monoxide (CO) and volatile organic compound (VOC) emissions are controlled by promoting complete combustion in the kiln and calciner and minimizing carbon and oily content of raw materials. Particulate matter emissions 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 CO, NO_X, SO_2, total hydrocarbons (THC as a measure of VOC) and opacity.

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, fly ash 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 permit 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 plastics, tire-derived fuel including tire fluff, reject roofing shingles, clean woody biomass, agricultural fibrous organic byproducts, pre-consumer reject paper, carpet-derived fuel, on-specification (on-spec) used fuel oil generated off-site and engineered fuel. 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.

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; an electric or diesel-powered shredder (approximately 630 horsepower (hp)) and screen (100 hp); a hopper; a conveyor; ductwork; and other miscellaneous equipment to unload, store and handle the alternative fuel materials. If not electrically powered, only diesel fuel shall be fired in the engines powering the equipment. 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 short-term operational trials for co-firing the following alternative fuel materials with coal.

   a. *Non-Chlorinated ~~Agricultural~~ Plastics*: This material consists of non-chlorinated, polyethylene 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. *Tires*: Tire-derived fuel (TDF) consists of shredded used tires, which may have steel belt material and tire fluff. Tire fluff consists of 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 bulk of 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 and other similar types of materials that may be tried with prior written approval of the Department. Agricultural organic fibrous byproducts may be blended and fired together. No more than 5,000 tons of agricultural byproducts will be stored on site at one 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. Pre-consumer paper may be blended and fired together. No more than 5,000 tons shall be fired in the kiln.

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

h. *Alternative Fuel Mix*: Subject to the individual limits on material quantities, alternative fuels for which all required sampling/analysis and stack tests (if necessary) have been conducted and satisfactory results obtained may be blended and fired as a separate alternative fuel trial. The blend ratio may be adjusted throughout the trial. This excludes on-spec used oil.

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

j. *Engineered Fuel*: This material consists of a blend of the above materials along with other known sorted and processed non-hazardous materials. No more than 11,500 tons shall be fired in the kiln.

k. *Expiration and Revocation*: Authorization to fire each alternative fuel material expires with this permit, at the end of 90 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 show elevated levels of chlorine, ~~fluorine~~ or metals.

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.

Due to extenuating circumstances, the permittee may request that the Bureau of Air Regulation extend the allowable operating days to finish firing the permitted amount of alternative fuel.

[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). The permittee shall provide the Department with the supplier's list and description of the sources of material used to create the engineered fuel and a certification that the material meets the specifications listed in the Criteria for Supplied Materials (Appendix E). The supplier must certify that the engineered fuel consists of non-hazardous materials. [Rule 62-4.070(3), F.A.C.]

5. Accepting Shipments of Alternative Fuels:

a. The permittee shall obtain the analytical results of an alternative fuel material prior to, or along with, the first delivery of the alternative fuel material. The permittee shall record the amount and type of each material received.

b. The permittee shall receive alternative fuel materials in covered trucks.

c. The alternative fuel materials shall be visibly marked and stored in separate piles under cover on top of a paved or compacted clay surface. Optionally, the materials may be stored in enclosed trailers.

d. Unless otherwise authorized, alternative fuel materials delivered to the site shall be burned in the kiln during the trial or removed from the site within 30 days of completing the trial.

e. 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.

[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 and Tire Fluff	4.5
Reject 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
Engineered Fuel	10-16
Alternative Fuel Mix	Prorated based on heating value

{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.]

MONITORING REQUIREMENTS

9. Sampling/Analyses: On the first day that an alternative fuel material is fired, the permittee shall take a grab sample at least once every four hours of as-fired material (approximately one gallon) before transfer to 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). The permittee shall use this same procedure to obtain a representative composite sample for each day that stack testing is conducted. At a minimum, the permittee shall use this procedure to obtain at least three, separate representative composite samples (which may

including the first day sample and any obtained during stack tests) that were taken at least three operating days apart. Each representative composite sample shall be analyzed for the following: heating value, moisture, density, volatiles, ash, sulfur, chlorine~~, fluorine~~ and mercury. Samples of tire-derived fuel, reject roofing shingles and clean woody biomass shall also be analyzed for the following metals: arsenic, cadmium, chromium, copper and lead. The composite samples for non-chlorinated agricultural plastics shall also be analyzed for pesticides. [Application No. 0530021-031-AC and Rule 62-4.070(3), F.A.C.]

10. 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.]

11. Operations and Emissions: During the trial period, the permittee shall continue to monitor: CO, NO_X, SO_2, 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.]

12. 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.]

13. 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~~

~~14. Compliance Tests: The permittee shall conduct the following stack tests to determine compliance with the 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. *Dioxins/Furans Stack Tests*: In accordance with EPA Method 23, the permittee shall conduct a stack test to determine compliance with the dioxins/furans emissions standard while co-firing coal with each alternative fuel having a chlorine content greater than 0.2% by weight based upon the initial chlorine content sampling by the supplier. 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 alternative fuels are only fired with the raw mill up, then the test may be conducted only with the raw mill up; otherwise separate tests shall be conducted with the raw mill up and the raw mill down.~~

~~b. *HCl Stack Tests*: In accordance with EPA Methods 26, 26A or 321, the permittee shall conduct a stack test determine the HCl emissions rate while co-firing coal with each alternative fuel having a chlorine content greater than 0.2% by weight based upon the initial chlorine content sampling by the supplier. The stack test shall consist of at least three, 1-hour test runs.~~

~~c. *Pesticides*: If analytical data detects pesticides in non-chlorinated agricultural plastics, 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. Tests shall be conducted 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). 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, 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.]~~

~~15. 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.]~~

NOTIFICATIONS, RECORDS AND REPORTS

16. Initial Delivery Notifications: Within one day, the permittee shall notify the Compliance Authority of receiving the first shipment of each alternative fuel material Written notifications may be made by email, fax transmittal or letter. [Rule 62-4.070(3), 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; an analysis of emissions from firing altertnative fuels compared to emissions from firing traditional fuels, 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.]

Contents

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit
µg: microgram
AAQS: Ambient Air Quality Standard
acf: actual cubic feet
acfm: actual cubic feet per minute
ARMS: Air Resource Management System (Department's database)
BACT: best available control technology
bhp: brake horsepower
Btu: British thermal units
CAM: compliance assurance monitoring
CEMS: continuous emissions monitoring system
cfm: cubic feet per minute
CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO_2: carbon dioxide

COMS: continuous opacity monitoring system

DARM: Division of Air Resource Management

DEP: Department of Environmental Protection

Department: Department of Environmental Protection

dscf: dry standard cubic feet

dscfm: dry standard cubic feet per minute

EPA: Environmental Protection Agency

ESP: electrostatic precipitator (control system for reducing particulate matter)

EU: emissions unit

F: fluoride

F.A.C.: Florida Administrative Code

F.A.W.: Florida Administrative Weekly

F.D.: forced draft

F.S.: Florida Statutes

FGD: flue gas desulfurization

FGR: flue gas recirculation

ft^2: square feet

ft^3: cubic feet

gpm: gallons per minute

gr: grains

HAP: hazardous air pollutant

Hg: mercury

I.D.: induced draft

ID: identification

kPa: kilopascals

lb: pound

MACT: maximum achievable technology

MMBtu: million British thermal units

MSDS: material safety data sheets

MW: megawatt

NESHAP: National Emissions Standards for Hazardous Air Pollutants

NO_X: nitrogen oxides

NSPS: New Source Performance Standards

O&M: operation and maintenance

O_2: oxygen

Pb: lead

PM: particulate matter

PM_{10}: particulate matter with a mean aerodynamic diameter of 10 microns or less

ppm: parts per million

ppmv: parts per million by volume

ppmvd: parts per million by volume, dry basis

QA: *quality assurance*

QC: quality control

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

RBLC: EPA's RACT/BACT/LAER Clearinghouse

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SIP: State Implementation Plan

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO_2: sulfur dioxide

TPD: tons/day

TPH: tons per hour

TPY: tons per year

TRS: total reduced sulfur

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

General Conditions

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permitconditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiateenforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditionsof this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey anyvested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not awaiver of or approval of any other department permit that may be required for other aspects of the total projectwhich are not addressed in this permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment oftitle, and not constitute authority for the use of submerged lands unless herein provided and the necessary title orleasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fundmay express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare,animal, or plant life, or property caused by the construction or operation of this permitted source, or from penaltiestherefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Departmentrules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (andrelated appurtenances) that are installed and used by the permittee to achieve compliance with the conditions ofthis permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities orsimilar systems when necessary to achieve compliance with the conditions of the permit and when required byDepartment rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, uponpresentation of credentials or other documents as may be required by law and at reasonable times, access to thepremises where the permitted activity is located or conducted to:

   a. Have access to and copy any records that must be kept under conditions of the permit;

   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to complywith any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the followinginformation:

   a. A description of and cause of noncompliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of thenoncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data andother information relating to the construction or operation of this permitted source which are submitted to theDepartment may be used by the Department as evidence in any enforcement case involving the permitted sourcearising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedureand appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes orDepartment rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology (no new determinations);

    b. Determination of Prevention of Significant Deterioration (no new determinations); and

    c. Compliance with New Source Performance Standards (no new standards).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        (a) The date, exact place, and time of sampling or measurements;

        (b) The person responsible for performing the sampling or measurements;

        (c) The dates analyses were performed;

        (d) The person responsible for performing the analyses;

        (e) The analytical techniques or methods used;

        (f) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Unless otherwise specified in the permit or other valid permits, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, exduding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction ofdestroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 624.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

4. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

5. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

6. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odorpresent in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which createsa nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

7. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]

8. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

Unless otherwise specified in the permit, the following testing requirementsapply to all emissions units that require testing.

9. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

10. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum

permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

11. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

12. Applicable Test Procedures:

    a. Required Sampling Time.

        (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

        (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be 60 minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and 30 minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

            (a) For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equalto the duration of the batch cycle or operation completion time.

            (b) The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

            (c) The minimum observation period for opacity tests conducted by employees or agents of he Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

    b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

    c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    d. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

    e. Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1 CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent or thermometric points	+/-2%

Bimetallic thermometer	Quarterly	Calibration liquid in glass	5° F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5° F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/- 0.001" mean of at least three readings; Max. deviation between readings, 0.004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, when 5% change observed, annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually		
	3. Check after each test series	Comparison check	5%

[Rule 62-297.310(4), F.A.C.]

13. Determination of Process Variables:

    a. *Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

    b. *Accuracy of Equipment.* Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

    [Rule 62-297.310(5), F.A.C.]

14. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms,access to work platforms, electrical power, and sampling equipment support. All stack sampling facilties must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

    a. Permanent Test Facilities. The owner or operator of an emissions unit for which acompliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

    b. Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

c. Sampling Ports.

(1) All sampling ports shall have a minimum inside diameter of 3 inches.

(2) The ports shall be capable of being sealed when not in use.

(3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

(4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

(5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

d. Work Platforms.

(1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

(2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

(3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

(4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

e. Access to Work Platform.

(1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

(2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.

f. Electrical Power.

(1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

(2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

g. Sampling Equipment Support.

(1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

(a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

(b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required

bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

(c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

(2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.

(3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

NOTIFICATIONS, RECORDS AND REPORTS

15. Test Notifications: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7), F.A.C.]

16. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]

17. Emissions Computation and Reporting:

a. *Applicability.* This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

b. *Computation of Emissions.* For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.

(1) Basic Approach. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.

(a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.

(b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C, but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.

(2) Continuous Emissions Monitoring System (CEMS).

(a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or

2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.

(b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:

1) A calibrated flow meter that records data on a continuous basis, if available; or

2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

(c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subpaagraph 62-210.370(2)(b)2., F.A.C., above.

(3) Mass Balance Calculations.

(a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:

1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and

2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

(b) Where the vendor of a raw material or fuel which is used in or at the emissions unitpublishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.

(c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.

(4) Emission Factors.

a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.

1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.

2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.

b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.

(5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.

(6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.

(7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.

(8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

(1). The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:

a. All Title V sources.

b. All synthetic non-Title V sources.

c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.

d. All facilities for which an annual operating report is required by rule or permit.

(2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.

(3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.

(4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.

(5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-

210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

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

18. Test Reports:

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information.

(1) The type, location, and designation of the emissions unit tested.

(2) The facility at which the emissions unit is located.

(3) The owner or operator of the emissions unit.

(4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.

(5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

(6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

(7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

(8) The date, starting time and duration of each sampling run.

(9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

(10) The number of points sampled and configuration and location of the sampling plane.

(11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

(12) The type, manufacturer and configuration of the sampling equipment used.

(13) Data related to the required calibration of the test equipment.

(14) Data on the identification, processing and weights of all filters used.

(15) Data on the types and amounts of any chemical solutions used.

(16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

(17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

(18) All measured and calculated data required to be determined by each applicable test procedure for each run.

(19) The detailed calculations for one run that relate the collected data to the calculated emission rate.

(20) The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.

(21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and

correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

On-Specification Used Oil Requirements

The permittee shall comply with the following requirements for on-specification used oil.

1. Specifications for Used Oil: Only "on-specification" used oil containing a PCB concentration of less than 50 ppm shall be fired at this facility.

   a. "On-specification" used oil is defined as used oil that meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) as listed below.

Constituent/Property	Allowable Level
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 ppm, maximum
Lead	100 ppm, maximum
Total Halogens	1000 ppm, maximum
Flash point	100° F, minimum

   Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil. The firing of off-specification used oil at this facility is prohibited.

   b. Used oil containing a PCB concentration of 50 ppm or more shall not be fired at this facility and shall not be blended to meet this requirement.

   c. On-specification used oil with a PCB concentration of 2 ppm to less than 50 ppm shall be fired only at normal unit operating temperatures and shall not be fired during periods of startup or shutdown.

   d. On-specification used oil with a PCB concentration of 2 ppm or less may be fired at any time.

   e. On-specification used oil shall meet the maximum sulfur content specified in the permit.

   [40 CFR 279.61]

2. Used Oil Certifications: For each delivery of used oil, the owner or operator shall receive from the marketer a certification that the used oil meets the specifications for "on-specification" used oil and that it contains a PCB concentration of less than 50 ppm. This certification shall also describe the basis for the certification, such as analytical results. Used oil to be fired for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs. Note that a claim that used oil does not contain quantifiable levels of PCBs (<2 ppm) must be documented by analysis or other information. The first person making the claim that the used oil does not contain PCBs is responsible for furnishing the documentation. The documentation can be tests, personal or special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the used oil contains no detectable PCBs. [40 CFR 761.20]

3. Notification to Marketers: Before accepting from each marketer the first shipment of on-specification used oil with a PCB concentration of 2 to less than 50 ppm, the owner or operator shall provide each marketer with a one-time written and signed notice certifying that the owner or operator will fire the used oil in a qualified combustion device and must identify the class of combustion device. The notice must state that EPA or a RCRA-delegated state agency has been given a description of the used oil management activities at the facility and that an industrial boiler or furnace will be used to fire the used oil with a PCB concentration of 2 to 49 ppm. The description of the used oil management activities may be submitted to the

Administrator, Hazardous Waste Regulation Section, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, FL 32399-2400. [40 CFR 761.20(e)]

4. Sampling and Analysis:

   a. If the owner or operator does not receive certification from the marketer as described above, the owner or operator shall sample and analyze each batch of used oil to be fired for the following parameters: arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs, and percent sulfur content by weight, ash, and BTU value (BTU per gallon).

   b. If the owner or operator receives the required certification from the marketer, the owner or operator shall sample at least one delivery of used oil received each calendar quarter and analyze the sample for arsenic, cadmium, chromium, lead, total halogens, flash point, PCBs, and percent sulfur content by weight, ash, and BTU value (BTU per gallon).

   c. Sampling and analysis shall be performed using approved methods specified in latest edition of EPA Publication SW-846, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods.

   d. If the analytical results show that the used oil does not meet the specifications for on-specification used oil, or that it contains a PCB concentration of 50 ppm or greater, the owner or operator shall immediately cease firing the used oil. The owner or operator shall also immediately notify the appropriate Compliance Authority of the analytical results and indicate the proposed means of disposal of the used oil.

   [Rule 62-4.070(3), F.A.C.; 40 CFR Parts 279 and 761]

5. Used Oil Recordkeeping Required: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Compliance Authority:

   a. Within 15 days following each calendar month, record the gallons of on-specification used oil received and fired during the previous calendar month and the previous 12 calendar months.

   b. The name and address of all marketers delivering used oil to the facility.

   c. Copies of the marketer certifications and any supporting information.

   d. If claimed, documentation that the used oil contains less than 2 ppm of PCBs, including the name and address of the person making the claim.

   e. Results of any sampling/analyses conducted.

   f. A copy of the notice to EPA and a copy of the one-time written notice provided to each marketer.

   [Rule 62-4.070(3), F.A.C.; 40 CFR 279.61; and, 40 CFR 761.20(e)]

6. Used Oil Reporting Required: Within 30 days following each calendar quarter, the owner or operator shall submit to the appropriate Compliance Authority, the analytical results and the total amount of on-specification used oil received and fired during the quarter. [Rule 62-4.070(3), F.A.C.; 40 CFR Parts 279 and 761]

The permittee shall provide each supplier with a copy of this air construction permit including the following criteria for material suppliers.

General Criteria

1. Material suppliers must use best efforts and good housekeeping practices to keep unwanted substances and incombustible materials from mixing with the alternative fuel materials.
2. All alternative fuel materials must be properly shredded and sized before being delivered to the Brooksville South Cement Plant. Each material supplier must develop QA/QC procedures to exclude foreign materials (e.g., painted material, treated material, metals, soils and incombustibles) from the alternative fuel materials.
3. Prior to Initial Delivery:
   a. For each alternative fuel material, the material supplier must take at least eight random grab samples (approximately 1 lb). The eight grab samples must be combined and thoroughly mixed. A composite sample (approximately 2 lb) will be made from mixed grab samples. The composite sample will be split into two duplicates (approximately 1 lb each). Each sample will be labeled with the date, time, and sampling staff name. The source material will be segregated from other materials until the analytical results are received.
   b. A ~~Each~~ composite sample must be submitted to an appropriate testing lab. The duplicate sample will be retained by the material supplier, CEMEX or an independent party in case a second analysis is needed. The testing lab will analyze each composite sample for: heating value, moisture, density, volatiles, ash, sulfur, chlorine, fluorine and mercury. Samples of tire-derived fuel, reject roofing shingles and clean woody biomass shall also be analyzed for the following metals: arsenic, cadmium, chromium, copper and lead. The composite samples for non-chlorinated agricultural plastics shall also be analyzed for pesticides.
   c. The material supplier or CEMEX must obtain the representative analytical results from the lab before the first delivery of an alternative fuel material to the Brooksville South Cement Plant. If the material supplier obtains the results, the supplier must provide a copy of the analytical results to the Brooksville South Cement Plant prior to, or along with, the first delivery of an alternative fuel material.
4. Each alternative fuel material shall be transported in covered trucks.

~~Agricultural~~ Non-chlorinated Plastics

This material must consist of non-chlorinated, polyethylene plastic used primarily in agricultural and silvicultural operations to prevent weed growth, control soil erosion and moisture exposure. Note that the Brooksville South Cement Plant cannot accept more than a total of 3,000 tons of this material. The composite samples must also be analyzed for pesticides.

Tire-Derived Fuel (TDF) and Tire Fluff (TDF)

Tire-derived fuel consists of shredded used tires, which may have steel belt material and tire fluff. Tire fluff consists of the shredded materials from the crumb of tires with no metal. No more than 4,500 tons shall be fired in the kiln. Note that the Brooksville South Cement Plant cannot accept more than a total of 4,500 tons of this material.

Manufacturer Reject Roofing Shingles

This material shall consist of never before used reject shingles. The incombustible grit material shall be removed from the shingles. The material supplier must obtain a copy of the manufacturer certification that shows the reject shingles are "asbestos free" and present a copy of the certification to the Brooksville South Cement Plant prior to, or along with any shipment. Note that the Brooksville South Cement Plant cannot accept more than a total of 10,000 tons of this material.

Clean Woody Biomass

This material may 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. Note that the Brooksville South Cement Plant cannot accept more than a total of 10,000 tons of this material.

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 of organic fibrous byproducts may be tried with prior written approval of the Department. Note that the Brooksville South Cement Plant cannot accept more than 5,000 tons of any single type of this material and no more than a total of 20,000 tons of all agricultural organic fibrous byproducts. Also, be aware that the Brooksville South Cement Plant may not store more than 5,000 tons of this material on site at any given time.

Pre-Consumer Paper

This material must consist of pre-consumer paper such as: 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. Note that the Brooksville South Cement Plant cannot accept more than a total of 5,000 tons of this material.

Carpet-Derived Fuel

This material consists of shredded new, reject or used carpet. Note that the Brooksville South Cement Plant cannot accept more than a total of 6,500 tons of this material.

Engineered Fuel

This material consists of a blend of the above materials along with other known sorted and processed non-hazardous materials. No more than 11,500 tons shall be fired in the kiln.

On-Specification (On-Spec) Used Oil Generated Off-Site

This material consists of on-spec used oil generated off-site. Note that the Brooksville South Cement Plant cannot accept more than a total of 111,111 gallons (approximately 400 tons) of this material. 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.

"On-specification" used oil is defined as used oil that meets the specifications of 40 CFR 279 (Standards for the Management of Used Oil) as listed below.

Constituent/Property	Allowable Level
Arsenic	5 ppm, maximum
Cadmium	2 ppm, maximum
Chromium	10 ppm, maximum
Lead	100 ppm, maximum
Total Halogens	1000 ppm, maximum
Flash point	100° F, minimum

Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil. The firing of off-specification used oil at this facility is prohibited.

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Thursday, June 30, 2011 5:11 PM
To: 'jdaniel@cemexusa.com'
Cc: 'gtownsend@cemexusa.com'; 'mlee@kooglerassociates.com'; 'jkoogler@kooglerassociates.com'; Zhang-Torres; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; 'langston.david@epa.gov'; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC
Attachments: 0530021-035-AC_Intent.pdf

Tracking:

Recipient	Read
'jdaniel@cemexusa.com'	
'gtownsend@cemexusa.com'	
'mlee@kooglerassociates.com'	
'jkoogler@kooglerassociates.com'	
Zhang-Torres	
'forney.kathleen@epa.gov'	
'abrams.heather@epa.gov'	
'oquendo.ana@epa.gov'	
'langston.david@epa.gov'	
Gibson, Victoria	
Friday, Barbara	
DeVore, Christy	
Koerner, Jeff	Read: 6/30/2011 5:18 PM

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0530021.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO
Processor: Christy DeVore

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other

Livingston, Sylvia

From: Daniel, James S. (Jim) [JDaniel@cemexusa.com]
Sent: Wednesday, July 06, 2011 11:47 AM
To: Livingston, Sylvia
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Good to go, thanks.

Jim Daniel
Plant Manager – Brooksville South Cement - United States of America
Office: (352) 799-7881 Fax: (352) 799-6088 Mobile: (352) 584-3798
Address: 10311 Cement Plant Rd, Brooksville, FL 34601
e-Mail: jdaniel@cemexusa.com
www.cemexusa.com

PARTNER OF THE YEAR


Please consider the environment before printing this email.

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Thursday, June 30, 2011 5:11 PM
To: Daniel, James S. (Jim)
Cc: Townsend, George; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; langston.david@epa.gov; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0530021.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO
Processor: Christy DeVore

Livingston, Sylvia

From: Townsend, George [gtownsend@cemexusa.com]
Sent: Friday, July 01, 2011 7:26 AM
To: Livingston, Sylvia
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Information received

George Townsend
Environmental Manager -Brooksville South - United States of America
Office: (352) 799-7881 Fax: (352) 799-6088 Mobile: (352) 238-9102
Address: 10311 Cement Plant Road, Brooksville, FL 34601
e-Mail: gtownsend@cemexusa.com
www.cemexusa.com

-----Original Message-----
From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Thursday, June 30, 2011 5:11 PM
To: Daniel, James S. (Jim)
Cc: Townsend, George; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; langston.david@epa.gov; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Dear Sir/ Madam:

Attached is the official Notice of Intent to Issue for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/053002
1.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC

Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO

Processor: Christy DeVore

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at http://appprod.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation

Sylvia Livingston

Division of Air Resource Management (DARM)

Department of Environmental Protection

850/717-9043

sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey
<http://survey.dep.state.fl.us/?refemail=Sylvia.Livingston@dep.state.fl.us> . Thank you in advance for completing the survey.

Livingston, Sylvia

From: Townsend, George [gtownsend@cemexusa.com]
Sent: Friday, July 01, 2011 7:37 AM
To: Livingston, Sylvia
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Please send me the word document for the public notice on the engineered fuels draft permit.

George Townsend
Environmental Manager -Brooksville South - United States of America
Office: (352) 799-7881 Fax: (352) 799-6088 Mobile: (352) 238-9102
Address: 10311 Cement Plant Road, Brooksville, FL 34601
e-Mail: gtownsend@cemexusa.com
www.cemexusa.com

-----Original Message-----
From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Thursday, June 30, 2011 5:11 PM
To: Daniel, James S. (Jim)
Cc: Townsend, George; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; langston.david@epa.gov; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Dear Sir/ Madam:

Attached is the official Notice of Intent to Issue for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/053002
1.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC

Livingston, Sylvia

From: Max Lee [mlee@kooglerassociates.com]
Sent: Friday, July 01, 2011 10:17 AM
To: Livingston, Sylvia; jdaniel@cemexusa.com
Cc: gtownsend@cemexusa.com; jkoogler@kooglerassociates.com; Zhang-Torres; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; langston.david@epa.gov; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

received and thank you!

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Thursday, June 30, 2011 5:11 PM
To: jdaniel@cemexusa.com
Cc: gtownsend@cemexusa.com; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; langston.david@epa.gov; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0530021.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO
Processor: Christy DeVore

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at http://appprod.dep.state.fl.us/air/emission/apds/default.asp.

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/717-9043
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Thursday, July 07, 2011 10:41 AM
To: 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; 'langston.david@epa.gov'
Subject: FW: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC
Attachments: 0530021-035-AC_Intent.pdf

EPA Representatives,

We are no longer receiving conformation that you have received our e-mails. Could you please respond to this e-mail as to whether you received it?

Thanks,

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/717-9043 (*New Phone*)
sylvia.livingston@dep.state.fl.us

From: Livingston, Sylvia
Sent: Thursday, June 30, 2011 5:11 PM
To: 'jdaniel@cemexusa.com'
Cc: 'gtownsend@cemexusa.com'; 'mlee@kooglerassociates.com'; 'jkoogler@kooglerassociates.com'; Zhang-Torres; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; 'langston.david@epa.gov'; Gibson, Victoria; Friday, Barbara; DeVore, Christy; Koerner, Jeff
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0530021.035.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-035-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO
Processor: Christy DeVore

Livingston, Sylvia

From: David Langston [Langston.David@epamail.epa.gov]
Sent: Thursday, July 07, 2011 10:45 AM
To: Livingston, Sylvia
Subject: Re: FW: CEMEX Construction Materials, LLC - Brooksville South Cement Plant; 0530021-035-AC

David Langston
Sr. Environmental Engineer
RCRA Programs
404-562-8478
langston.david@epa.gov