

Florida Department of
Environmental Protection

Memorandum

TO: ~~Trina Vietthauer~~ JH.
THROUGH: Jon Holtom JA
FROM: Teresa Heron
DATE: May 25, 2011
SUBJECT: CEMEX Brooksville Cement Plant
DEP File No. 0530021-033-AC (PSD-FL-351D)
South Brooksville Cement Plant – Kiln 2
Production Rate Increase

This project is subject to minor source preconstruction review. The original project to construct the new Cement Line 2 triggered the PSD requirements and the project went through a PSD preconstruction review. The requested production increase to recognize the full installed capacity of the kiln and the minor equipment reconfiguration of the raw mill do not result in any significant emissions increases. Line 2 began operation on November 28, 2008 and initial and annual performance testing has been conducted.

Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit (letter) Modification; and
- P.E. Certification.

The present request is to increase the permitted capacity of Line 2 from 2,800 tons per day (TPD) to 3,500 TPD; an increase of 25 percent (%). Although presently restricted by the permit to 2,800 TPD, the plant was constructed with a daily nominal capacity of 3,000 TPD based on an hourly permitted capacity of 125 tons per hour (TPH). Therefore the requested final daily production limit represents only a 16.7% increase beyond the “nominal capacity” of the kiln.

CEMEX South Brooksville Cement Plant is located in Hernando County, Florida. The Technical Evaluation and Preliminary Determination document provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project.

We recommend your approval of the attached Draft Permit.

Attachments

PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

PERMITTEE

CEMEX Construction Materials Florida, LLC
South Brooksville Cement Plant
10311 Cement Plant Road
Brooksville, Florida 32669

DEP File No. 0530021-033-AC (PSD-FL-351D)
Portland Cement Line 2 Production Increase
F.L. Smidth Design Configuration
Hernando County, Florida

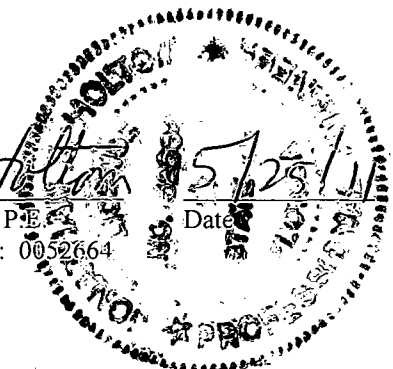
Project: On April 15, 2011, CEMEX submitted an application for revisions to the air construction permit for Line 2 to perform a minor equipment reconfiguration at the raw mill and to increase the permitted production rates through the raw mill and kiln in order to recognize the full installed capacity of the F.L. Smidth "as built" design configuration. These changes will not result in an increase in any PSD pollutant equal to or greater than the respective significant emission rate (SER) as defined in the Department rules and the project is not subject to PSD review. The Technical Evaluation and Preliminary Determination provide additional details of the project.

Permit No. No.0530021-009-AC (PSD-FL-351) was issued to construct Portland Cement Line 2 in 2006 and was subject to the rules for the prevention of significant deterioration (PSD) and a determination of best available control technology (BACT). In 2010, this permit was modified to reflect the F.L. Smidth "as built" configuration by permit No. 0530021-018-AC (PSD-FL-351C). I have received reasonable assurance that the "as built" design configuration can meet the proposed emissions rates, which are lower than the requirements of the previously conducted PSD review and BACT determination, at the increased production rates.

I prepared/reviewed and the Department distributed a technical evaluation and preliminary determination containing the details of the project and rationale for the preliminary decision to reissue the "as-built" permit with the requested production increases. This project was processed as a reissuance of the previous permit, but was done so as line-item changes to the previously issued conditions rather than as a completely new permit. This certification only extends to the changes highlighted in the draft permit and does not assume any responsibility for previously established conditions or BACT determinations.

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 aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).

This review was conducted by Teresa Heron under my responsible supervision.


Jonathan K. Holtom, P.E.
Registration Number: 0052664
Date: 5/29/11



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

Sent by Electronic Mail – Received Receipt Requested

Mr. James S. Daniel, Plant Manager jdaniel@cemexusa.com
CEMEX Brooksville South Cement Plant
10311 Cement Plant Road
Brooksville, Florida 32669

Re: DEP File No. 0530021-033-AC (PSD-FL-351D)
Brooksville South Cement Plant
Production Increase – Portland Cement Line 2

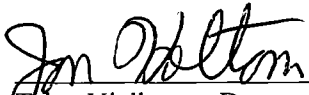
Dear Mr. Daniel:

On April 15, 2011, you submitted an application for an air construction permit modification. The purpose of the permit modification is to increase production of the recently commissioned Line 2 at the CEMEX Brooksville South Cement Plant located in Hernando County at the address given above.

Enclosed are the following documents: Written Notice of Intent to Issue Air Permit; Public Notice of Intent to Issue Air Permit; Technical Evaluation and Preliminary Determination; and a 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, Teresa Heron, at (850) 717-9082.

Sincerely,

for 
Trina Vielhauer, Deputy Director
Division of Air Resource Management

5/25/11
(Date)

Enclosures

TLV/jkh/tmh

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

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 indicate; (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

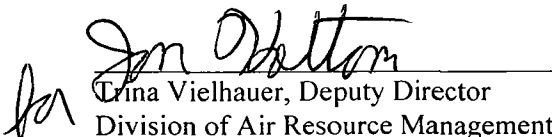
WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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.


Tina Vielhauer, Deputy Director
Division of Air Resource Management

5/25/11
(Date)

CERTIFICATE OF SERVICE

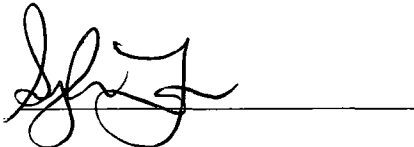
The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit Package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit with Appendices) was sent by electronic mail, or link to these documents made available electronically on a publicly assessable server, with received receipt requested before close of business on

5/25/11 to the persons listed below.

- George Townsend, CEMEX: gtownsend@cemexusa.com
- Lillian DePrimo, CEMEX: lillianf.deprimo@cemex.com
- John Koogler, P.E., K&A: jkoogler@kooglerassociates.com
- Max Lee, P.E., K&A: mlee@kooglerassociates.com
- Cindy Zhang-Torres, DEP SWD: cindy.zhang-torres@dep.state.fl.us
- David Hamilton, County Administrator, Hernando County: CountyAdministrator@hernandocounty.us
- Heather Abrams, EPA Region 4: abrams.heather@epa.gov
- Ana Oquendo, EPA Region 4: oquendo.ana@epamail.epa.gov
- Katy Forney, EPA Region 4: forney.kathleen@epamail.epa.gov
- Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


(Clerk)

5/25/11
Date

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation

Draft Air Permit No. 0530021-033-AC (PSD-FL-351D)
CEMEX Brooksville South Cement Plant – Line 2
Permitted Capacity Increase
Hernando County

Applicant: The applicant for this project is CEMEX Construction Materials Florida, LLC (CEMEX). The applicant's authorized representative and mailing address is: Mr. James S. Daniel, Plant Manager, CEMEX Brooksville South Cement Plant, 10311 Cement Plant Road, Brooksville, Florida 32669.

Facility Location: The applicant, CEMEX, operates the existing Brooksville South Cement Plant, which is located in Hernando County at 10311 Cement Plant Road in Brooksville, Florida.

Project: The project is to issue an air construction permit to reflect the as-built mechanical capacity for the previously permitted and constructed Portland Cement Line 2. Line 2 has a permitted capacity of 2,800 tons per day of clinker and was constructed pursuant to Air Permit 0530021-009-AC (PSD-FL-351) issued in 2005 and revised in 2010 (Air Permit 0530021-018-AC, PSD-FL-351C) to reflect the as-built physical configuration. A review for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) were conducted for Line 2 as part of the original project. This line began operation in November 2008. A new PSD review is not required for this project to recognize the full installed capacity of the kiln.

The techniques used to control emissions from Kiln 2 (the main emissions unit) are:

- Staged combustion calciner and raw material selection for the control of volatile organic compounds (VOC), carbon monoxide (CO) and nitrogen oxides (NO_x);
- Selective non-catalytic reduction (SNCR) by ammonia injection to further control NO_x;
- Chemical reactions in the kiln, dry scrubbing in the calciner and contact with moist limestone in the raw mill to control sulfur dioxide (SO₂);
- Fabric filter baghouses to control particulate matter (PM/PM₁₀); and
- Raw material and fuel selection coupled with kiln filter dust shuttling to minimize mercury (Hg) emissions.

The present request is to increase the permitted capacity of Line 2 from 2,800 tons per day (TPD) to 3,500 TPD; an increase of 25%. Although presently restricted by the permit to 2,800 TPD, the plant was constructed with a daily nominal capacity of 3,000 TPD based on an hourly permitted capacity of 125 tons per hour (TPH). Therefore, the requested final daily production limit represents only a 16.7% increase beyond the "nominal capacity" of the kiln.

The pyroprocessing equipment supplier was F.L. Smidth (FLS). FLS supplied similarly designed pyroprocessing lines at the Cemex Cement Plant in Miami and the Titan/Tarmac Pennsuko Cement Plant in Medley. Both kilns were able to accommodate production increases similar to the increase requested by Cemex for Brooksville South Line 2.

The Cemex expert who oversaw the production increase at the Miami Plant and the construction and commissioning of Line 2 at the Brooksville South Plant reviewed the design basis and performance of Line 2 and concluded that:

- The pyroprocessing area and kiln fan capacity of Line 2 are greater than the Miami Plant that has demonstrated sustained clinker production greater than 3,600 TPD;
- The raw material handling system and the raw mill were designed with more than adequate capacity to support 3,500 TPD of clinker production;
- The main baghouse and the gas conditioning tower have adequate reserve to support 3,500 TPD of clinker production;

(Public Notice to be Published in the Newspaper)

- The kiln feed system design capacity is at the level necessary to support 3,500 TPD of clinker production and likely has reserve capacity even at this production level

The Department reviewed the continuous emission monitoring system (CEMS) records indicating emissions 25% less, or even lower, than the permitted emission rates. The Department concurs with CEMEX that Kiln 2 can comply with the present mass emission rate limitations in terms of pounds per hour (lb/hr) given in the PSD permit while producing 3,500 TPD. The Department concludes that Kiln 2 can and will be required to comply with 25% lower BACT limits in terms of lb/ton of clinker compared with the values given in the original permit.

CEMEX closed the two kilns at its nearby Brooksville North facility in 2008 due to economic reasons. The older and less efficient Line 1 at the Brooksville South Plant generally now operates when Line 2 does not. The ability to operate Line 2 at a higher daily rate will further reduce the need to operate Line 1 to provide marginal amounts of clinker in the present market. Operating at higher daily rates until stocks are full will generally be followed by longer periods of clinker production down time.

Under the present circumstances the Department has determined that Line 2 has not begun normal operations. Furthermore, the Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that such unit-specific allowable emissions limits are federally enforceable. Based on the foregoing, there will not be an increase in any PSD pollutant equal to or greater than the respective significant emission rate (SER) as defined in the Department rules and the project is not subject to PSD review.

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 Bureau of Air Regulation's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Bureau of Air Regulation's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Bureau of Air Regulation'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 at the following website:

www.dep.state.fl.us/Air/emission/construction/rinker.htm

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 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any

oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft permit, the Permitting Authority shall issue a revised draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

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. 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 Department'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 how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the 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; and (g) A statement of the relief sought by the petitioner, stating precisely the action 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.



TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

CEMEX Construction Materials Florida, LLC
Line 2 Production Increase
CEMEX Brooksville South Cement Plant
Hernando County

DEP File No. 0530021-033-AC
PSD-FL-351D

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Special Projects Section

May 25, 2011

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

Facility Description and Location

The facility consists of the CEMEX Brooksville South Cement Plant owned by CEMEX Construction Materials Florida, LLC (CEMEX) and the Central Power and Lime (CP&L) Power Plant owned by Arroyo Energy. The two plants operate under a single facility Title V Air Operation Permit. The facility is located at the site indicated in Figure 1 below in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. The UTM coordinates are Zone 17; 360.0 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 a National Ambient Air Quality Standard (NAAQS).



Figure 1. Facility location, Brooksville, Florida. Figure 2. Baghouse and stack for Line 1 and CP&L.

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). The cement plant is categorized under Standard Industrial Classification (SIC) Code No. 3241. Line 1 and the CP&L Power Plant share a common baghouse and stack that are shown in Figure 2 above. Line 2, the subject of the present evaluation, initially commenced operation in November 2008 and has a separate stack and pollution control equipment.

Facility Regulatory Categories

The existing facility is identified as a major source of hazardous air pollutants (HAP).

The existing facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.)

The existing facility is a major stationary source with respect to the rules for the Prevention of Significant Deterioration (PSD) at Rule 62-212.400, F.A.C.

Background

Cement Line 2, with a current permitted capacity of 2,800 tons per day of clinker, was constructed pursuant to permit No. 0530021-009-AC (PSD-FL-351) issued in 2005 to the previous owner, Rinker. However, based on the final selected equipment supplier, F.L. Smidth (FLS), the original permit was modified by permit No. 0530021-018-AC (PSD-FL-351C), which was issued in 2010 to reflect the FLS "as built" configuration. A review for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) were conducted for Line 2 in the original PSD permit. This project is to issue an air construction permit to increase the production capacity for the previously permitted and constructed Portland Cement Line 2 to better reflect the design capacity of the FLS equipment. To accommodate the requested production increase, CEMEX proposed a corresponding decrease in allowable emissions rates to avoid triggering a PSD review.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Line 2 began operation in November 2008 and compliance with the BACT requirements and other applicable emission regulations was demonstrated in the first half of 2009. The key BACT emission limits from Kiln 2 and Clinker Cooler 2 (the main emissions units) are based on the following controls:

- Staged combustion calciner and raw material selection for the control of volatile organic compounds (VOC), carbon monoxide (CO) and nitrogen oxides (NO_x);
- Selective non-catalytic reduction (SNCR) by ammonia injection to further control NO_x;
- Dry scrubbing in the calciner and contact with moist limestone in the raw mill to control sulfur dioxide (SO₂);
- Raw material and fuel selection to minimize mercury (Hg) emissions; and
- Fabric filter baghouses to control particulate matter (PM/PM₁₀).

The tables below are included at this point to put into better perspective the present application and changes requested by CEMEX. Table 1 was included in the original permit authorizing construction of Line 2. It was based on information submitted in the original application to construct Line 2. This table is being updated by this project, adding the 2010 and 2011 columns to show the change in proposed potential emissions. The 2005 column indicating maximum emissions is an estimate of the potential-to-emit (PTE) in tons per year (TPY) per the original Line 2 application. The 2010 column indicates the PTE in tons per year per the “as-built” permit modification project. The 2011 column represents the proposed PTE in tons per year following the requested production increase. The maximum emissions include contributions from Kiln 2 and Clinker Cooler 2 as well as all of the raw materials and product storage, handling and conveyance operations.

Table 1. Cement Line 2 Project PSD Applicability Calculations and Potential to Emit.

POLLUTANT	PSD SIGNIFICANCE LEVELS (TPY)	MAXIMUM EMISSIONS (TPY)			THIS PROJECT SUBJECT TO PSD REVIEW?
		2005	2010	2011	
PM/PM ₁₀	25/15	256.4	214.1/171.1	192.7/154.8	No
SO ₂	40	122.7	128.74	120.2	No
NO _x	40	1,126.2	1,106.6	1,003.5	No
CO	100	2,133.6	1,993	1,841.9	No
VOC (Ozone)	40	105.3	68.7	61.7	No
Mercury (Hg)	200 pounds per year (lb/yr)	122 lb/yr	122 lb/yr	122 lb/yr	No

For reference, all of the SO₂, NO_x, CO, VOC and Hg are emitted from the single baghouse and stack that handle the combined emissions from Raw Mill 2, Kiln 2 and Clinker Cooler 2. PM/PM₁₀ are also emitted from Kiln 2 and Clinker Cooler 2 but are also emitted from the materials and product handling, storage and conveyance operations. Table 2 is a comparison of the stack compliance tests conducted during February 2011 with the BACT emission limits in the existing permit. The values are in pounds per ton of clinker (lb/ton clinker) and in pounds per hour (lb/hr).

Table 2. 2011 Compliance Emissions Testing for Common Kiln 2/Clinker Cooler 2 Exhaust Stack.

Pollutant	BACT Limits (lb/ton clinker)	Emissions Tests (lb/ton clinker)	BACT Limit (lb/hr)	Emissions Tests (lb/hr)
PM/PM ₁₀	0.23/0.20	0.04	28.8/25.0	4.84
SO ₂	0.23	0.004	28.8	0.49
NO _x	1.95	1.29	243.75	147
CO	3.6	0.68	450.0	68.2
VOC	0.12	0.03	15.0	3.15

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The results include both Kiln 2 and Clinker Cooler 2 that exhaust through a single stack. As a general observation, the PTE PM/PM₁₀ from Kiln 2 and Clinker Cooler 2 comprise on the order of half of the PTE for PM/PM₁₀ from all of Line 2.

The annual continuous emissions monitoring systems (CEMS) data for 2010 found that emissions for NO_x, CO, VOC and SO₂ averaged 1.77; 1.33; 0.05 and 0.01 lb/ton clinker, respectively. The kiln performed very well with respect to the conventional PSD pollutants.

The company also conducted tests for Hg and dioxin/furan (D/F) required by 40 Code of Federal Regulations (CFR) Part 60, Subpart LLL - National Emission Standards for Hazardous Air Pollutants (NESHAP) From the Portland Cement Manufacturing Industry (Subpart LLL).

Table 3. D/F and Hg Testing for Common Kiln 2/Clinker Cooler 2 Exhaust Stack.

Pollutant	Hg (µg/dscm ¹)		D/F (ng TEQ/dscm ²)	
	Test	LLL	Test	LLL
Raw Mill On	0.07	41	0.0018	0.2
Raw Mill Off	8.48	41	0.0444	0.4

1. micrograms per dry standard cubic meter (µg/dscm)
2. nanograms total toxic equivalent per dry standard cubic meter (ng TEQ/dscm)

The D/F tests were conducted in May 2010. The D/F results are excellent and are several orders of magnitude less than the respective limits. The Hg tests were conducted in August 2010.

Kiln 2 at the Brooksville South Cement Plant is the first project in Florida (and possibly the U.S.) that actually has an applicable mercury standard pursuant to 40 CFR 63, Subpart LLL, since construction commenced after December 2, 2005. The applicable standard of 41 µg Hg/dscm was revised on September 9, 2010. According to Subpart LLL, any source defined as an existing source in §63.1351, and that was subject to a PM, mercury, total hydrocarbons (THC), D/F, or opacity emissions limit prior to September 9, 2010, must continue to meet the limits stated in Table 2 of §62.1343 under Subpart LLL until September 9, 2013.

Table 4. 2010 Compliance Emissions Testing for Finish Mill (and process heater) Exhaust Stack.

Pollutant	BACT Permit Limits (lb/hr)	Emissions Tests (lb/hr and/or grains (gr)/dscf)	Annualized Limits (TPY)
PM/PM ₁₀ ¹	8.6/6.0	1.20 lb/hr heater on ³ 1.67 lb/hr heater off ³	37.7/26.3
PM/PM ₁₀ ¹	0.01/0.007 grains/dscf	0.002 gr/dscf heater on ³ 0.005 gr/dscf heater off ³	37.7/26.3
NO _x	30.92	0.5 lb/hr ²	38.7
CO	17.84	0.2 lb/hr ²	22.3
VE	5% opacity	0% opacity ²	
SO ₂	2.1	non stack test ⁴	2.63

Notes:

- ¹ PM/PM₁₀ limits (same limit with the heater on/off) as stated in the "as-built" permit No. 0530021-018-AC.
- ² Emissions stack tests for NO_x, CO, and VE conducted on June 30, 2010.
- ³ Emissions stack tests for PM/PM₁₀ conducted on October 8 and 21, 2010.
- ⁴ Compliance with sulfur limits based on ASTM Methods.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Table 5. Existing and New proposed limits for Finish Mill (EU 052).

Pollutant	BACT 2009 Permit Limits (lb/hr)	BACT 2009 Permit Limits (grains/dscf)	Proposed 2011 BACT Limit	Proposed Annualized Limits (TPY)
PM/PM ₁₀	8.6/6.0	0.01/0.007	0.029/0.020 lb/ton feed _{FM}	25.7/18
SO ₂	2.1	N/A	2.10 lb/hr	2.63
NO _x	30.92	N/A	5.40 lb/hr	6.80
CO	17.84	N/A	1.40 lb/hr	1.88
VOC/THC	N/A	N/A	0.30 lb/hr	0.40
VE	5% opacity	5% opacity	10% opacity	

Note: Proposed PM/PM₁₀ emissions limits based on 7,500 hr/yr and a finish mill feed rate of 240 tons/hr. Compliance with these emissions limits have already been demonstrated.

Table 6. Existing and New proposed limits for Kiln/Raw Mill/Cooler (EU 044).

POLLUTANT	EMISSION LIMITS			
	EXISTING	PROPOSED	EXISTING	PROPOSED
PM	0.136 lb/ton of dry preheater feed; 0.230 lb/ton of clinker	0.112 lb/ton of dry preheater feed; 0.185 lb/ton of clinker	28.8 lb/hr	28.8 lb/hr
PM ₁₀	0.118 lb/ton of dry preheater feed; 0.200 lb/ton of clinker	0.097 lb/ton of dry preheater feed; 0.160 lb/ton of clinker	25.0 lb/hr	25.0 lb/hr
SO ₂	0.23 lb/ton of clinker	0.185 lb/ton of clinker	28.8 lb/hour	28.8 lb/hour
NO _x	1.95 lb/ton of clinker	1.56 lb/ton of clinker	243.75 lb/hour	243.75 lb/hour
CO	3.6 lb/ton of clinker	2.88 lb/ton of clinker	450.0 lb/hour	450.0 lb/hour
VOC	0.12 lb/ton of clinker	0.096 lb/ton of clinker	15.0 lb/hour	15.0 lb/hour
VE	10% opacity	10% opacity		
Mercury	41 µg/dscm	41 µg/dscm		
		122 lb/yr	122 lb/yr	122 lb/yr

Averaging Time: No changes in the averaging time of each pollutant from existing permit.

Project Description

CEMEX requests an increase in its daily clinker permitted production limit from 2,800 tons per day (TPD) to 3,500 TPD and an annual production increase from 1,022,000 tons per year (TPY) to 1,277,500 TPY, along with several other process rate increases. The company proposes reductions in allowable emission limits per unit of production (lb/ton of clinker) such that there will be no short-term equivalent or annual emission limit increases. The production limit increase is approximately 25 percent.

In addition to the production increase, CEMEX is requesting authorization for: a minor equipment reconfiguration in the design of the Raw Mill material input feeder; a change in the format of the finish mill PM/PM₁₀ emissions limits for Line 2; an increase in the allowable opacity limit for the finish mill stack from 5% to 10% to match the opacity limit from the Line 2 Kiln stack; and, the authorization to inject tires or tire derived fuel directly into the calciner at multiple locations. The applicant's rationale for these requests follows below.

Table 7 lists the current and applicant-proposed rate increase for each emission unit.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Table 7. Current and Proposed Annual Throughput Rates and Operating Times.

Emission Unit No.	Name	Current Rates			Proposed Rated		
		Hourly	Annual	Operating Factor	Hourly	Annual	Operating Factor
		(tph)	(tpy)	(hr/yr)	(tph)	(tpy)	(hr/yr)
Process: In-line Raw Mill, Kiln 2, Pre-Heater, Pre-Calculator and Clinker Cooler 2							
EU 044	Main Baghouse Throughput	30	262,800	8,760	37.5	328,500	8,760
	Raw Mill Grinding and Drying	225	1,971,000	8,760	246	2,107,875	8,760
Process: Raw Mix and Raw Meal Handling and Storage System							
EU 045	Filter Dust Bin	30	262,800	8,760	37.5	328,500	8,760
	Filter Dust Bin Loadout Spout	80	80,000	1,000	80	80,000	1,000
EU 046	Blend Silo – Input	300	2,628,000	8,760	300	2,628,000	8,760
EU 047	Blend Silo Discharge	241	2,111,160 1,686,300	8,760	258	2,107,875	8,760
	Kiln Feed Bin						
	Kiln Feed Transport						
Process: Clinker Handling and Storage							
EU 048	Clinker Transport	125	1,095,000	8,760	156	1,277,500	8,760
EU 050	Clinker Storage Silo Discharge 1	211	1,582,500	7,500	215	1,612,500	7,500
	Clinker Storage Silo Discharge 2	211	1,582,500	7,500	215	1,612,500	7,500
	Clinker Silo	125	1,095,000	8,760	156	1,277,500	8,760
Process: Finish Mill System							
EU 051	Finish Mill Additives Belt	127	953,250	7,500	127	953,250	7,500
EU 052	Finish Mill	240	1,800,000	7,500	240	1,800,000	7,500
EU 054	Finish Mill Bucket Elevator	106	795,000	7,500	106	795,000	7,500
EU 057	Finish Mill Cement Transport	240	1,800,000	7,500	240	1,800,000	7,500
	Finish Mill Rejects Transport	106	795,000		106	795,000	
Process: Cement Silos & Loadout							
EU 058	Cement Silo 5	240	2,102,400	8,760	240	2,102,400	8,760
	Cement Silo 5 Loading Bin	625	5,475,000	8,760	625	5,475,000	
	Cement Silo 5 Loadout Spout N	625	5,475,000	8,760	625	5,475,000	
	Cement Silo 5 Loadout Spout S	625	5,475,000	8,760	625	5,475,000	
EU 059	Multi-Cell Cement Silo	240	2,102,400	8,760	240	2,102,400	8,760
	Multi Cell Cement Silo Alleviator	240	2,102,400	8,760	240	2,102,400	8,760
	Multi Cell Loadout Transport	625	5,475,000	8,760	625	5,475,000	8,760
	Multi-Cell Silo Loadout	625	625,000	1,000	625	625,000	1,000
EU 060	Coal Mill	20.0	165,000	8,760	20.0	175,200	8,760
EU 061	Fine Coal Bin	20.0	175,200	8,760	20.0	175,200	8,760
EU 062	Packing Plant	200	1,752,000	8,760	200	1,752,000	8,760

In-line Raw Mill (EU 044)

The applicant proposes an equipment reconfiguration to the raw mill material feeder system with a projected cost of \$150,000 to \$250,000. According to the applicant, the raw mill was designed for a process rate of 246 tons per hour (dry basis) at a feed material moisture content of 14 percent. However, the system has not been able to consistently achieve this rate with a feed material moisture content over 11 percent. The applicant states the restriction (more prevalent during wet periods) is caused by the plugging of the raw material feed chute and

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

diverter gate that were designed to split a portion of the raw material feed between the flash dryer and the raw mill inlet. When this happens, the diverter gate fails to operate and all of the raw material is sent through the flash dryer, effectively overloading the drying capacity.

The two options that the applicant is considering to resolve this problem are:

- either a reconfiguration of the handling chute and diverter gate; or
- the installation of a screen that will split the raw material feed allowing the coarse fraction to enter the raw mill directly while the fine fraction passes through the flash dryer.

The applicant adds that the raw mill itself (a F.L. Smidth ball mill) is capable of grinding the raw material necessary to support a clinker production rate of 3,500 tons per day and that it is only the feed system of the raw mill that will be reconfigured. These areas include the diverter box (that over-feeds the flash dryer when the moisture content of the raw materials is greater than 12% - thus overloading the dryer), drop pipes feeding out of the diverter box and possibly the installation of a short conveyor downstream of the diverter box that will feed from the diverter box to a drop pipe.

The Department concurs with the applicant that this equipment reconfiguration is not a modification or a reconstruction as defined in 40 CFR 60.14 and 40 CFR 60.15 of Subpart A, respectively. This concurrence is based upon reasonable assurance provided by CEMEX's consultant that this work can be accomplished without a capital expenditure (as defined in 40 CFR 60.2) and/or a fixed capital cost greater than 50% of the cost to rebuild the affected facility.

Injection of tires and tire derived fuel (E.U. 044)

The original permit for Line 2, Project No. 0530021-009-AC (PSD-FL-351), authorized the introduction of tires as an allowable fuel into the feed end (cold side) of the kiln amounting to 30% of the allowable heat input, by means of a tire feeder system designed with a double airlock. Project No. 0530021-015-AC (PSD-FL-351A), issued as a minor revision to Project No. 0530021-009-AC (PSD-FL-351), authorized the installation of a tire injection mechanism system (TIMS) near the product end (hot side) of the kiln, providing two possible injection points instead of one. CEMEX is now requesting the ability to inject tires or tire derived fuel at multiple locations within the calciner. The applicant claims that there will be no changes in actual emissions by injecting the tires at any location within the calciner, as the temperature and combustion characteristics are uniform throughout the calciner and are the same as the conditions at the feed end of the kiln, which was the original approved location. The applicant has proposed to use an equivalent double airlock design for any new injection ports that they might add to the calciner.

The Department concurs with the applicant that potential emissions will not be affected by injecting tires or tire derived fuel at different locations within the calciner and agrees to the request to install double airlock injection ports at multiple locations. The permitted rate of tire derived fuel will remain current rate of 30% of the allowable heat input.

Finish Mill (E.U. 052)

The applicant proposes to restate the PM/PM₁₀ finish mill emission limits in terms of pounds per tons of finish mill feed rate (lb/ton feed_{FM}). This concept is analogous to relating the PM/PM₁₀ emission limits for the kiln/raw mill/cooler to the preheater feed rate. According to the application, the size of the two baghouses are comparable but the dust loading to the finish mill baghouse is approximately 6.5 times greater than the maximum expected dust loading to the kiln/raw mill/clinker cooler baghouse (240 tons per hour vs. 37.5 tons per hour). It is believed that the operating conditions of the finish mill baghouse are considerably more severe. The applicant believes that the proposed PM/PM₁₀ limits should be considered reasonable and acceptable as restated BACT limits in terms of lb/ton finish mill feed (lb/ton feed_{FM}).

The applicant's rationale for these requests follows below:

The F.L. Smidth finish mill is a vertical roller mill style with a throughput capacity of 240 tons per hour, of which, approximately 95% is clinker and 5% is gypsum. The roller mill is swept with an air stream of

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

approximately 270,000 actual cubic feet per minute (acfm) at a nominal temperature of 230° F and a nominal moisture content of five percent. This flow translates to a standard flow rate of approximately 200,000 dry standard cubic feet per minute (dscfm). The entire 240 tons per hour output of the finish mill is delivered to a baghouse dust collector for product recovery in the 270,000 acfm air stream. The recovered finished cement is delivered to cement silos while the airstream discharged from the baghouse is split with one fraction discharged to the atmosphere and the remaining fraction recirculated back to the finish mill. The fraction of the airstream re-circulated back to the finish mill varies depending upon the heat needed to supplement the finish mill's air heater. For the as-built permitting purposes (permit No. 0530021-018-AC (PSD-FL-351C)), it was estimated that the maximum amount of air discharged to the atmosphere through the baghouse stack would be 50 percent of the flow through the baghouse; or 100,000 dry standard cubic feet per minute. This is the flow that was used to establish the equivalent PM/PM₁₀ pound per hour limitations. It should be noted that the fractions of air leaving the baghouse that are discharged to the atmosphere and re-circulated (to recover the heat in the gas stream for purposes of energy conservation) back to the finish mill have no effect on the airflow through the baghouse or the dust loading to the baghouse.

The applicant adds that the kiln/raw mill/cooler baghouse design airflow rate is 330,000 acfm at a temperature of 260° F and a moisture content of approximately 10 percent (220,000 dscfm). The flow diagram for this plant includes a cyclone separator located before the main baghouse with two outputs, one to the main baghouse and another one to the blend silo.

The applicant states that the required kiln/raw mill/cooler system baghouse and cyclone separator efficiency to meet its PM/PM₁₀ emission limits is 99.91 percent and the equivalent PM/PM₁₀ concentrations in the discharged gas stream (based on a flow of 220,000 dscfm) are 0.015 and 0.013 gr/dscm, respectively. In comparison, the efficiency required for the finish mill baghouse is 99.998 percent in order to meet the previously established BACT concentration limits of 0.01 and 0.007 gr/dscf (a PM₁₀ limit approximately half the concentration limit required of the main baghouse). As presented above, it appears that the cyclonic separator is designed to remove approximately 86 percent of the 263 tons per hour of raw mill/kiln throughput capacity before entering the main baghouse leaving the remaining 14 percent of product, or approximately 37.5 tons/hour, dust loading to this system baghouse; in contrast to the entire dust loading of 240 ton/hr to the finish mill baghouse. In operation, the cyclone has actually been removing closer to 94 percent of the material, leaving only 6 percent for the baghouse to control.

The applicant further states that the original BACT concentration limits for PM/PM₁₀ of 0.01/0.007 gr/dscf were a design specification that was guaranteed by the original equipment manufacturer, which was used as the basis for the original construction permit No. 0530021-009-AC (PSD-FL-351). Due to the substantial change in air flow and dust loading resulting from the as-built design reflected in permit No. 0530021-018-AC (PSD-FL-351C), the manufacturer of the installed equipment (FLS) has not provided a guarantee for this same design specification. However, the proposed PM/PM₁₀ emission limits of 0.029/0.020 pounds per ton of finish mill feed (equivalent to pound per hour emission rates of 6.86/4.40) are based on the same BACT concentration limits of 0.01/0.007 gr/dscf and the same finish mill feed rate of 240 tons per hour, but on a lower stack gas discharge rate of 80,000 dscfm. The flow rate used to establish the proposed PM/PM₁₀ emission limits was lowered from 100,000 dscfm to 80,000 dscfm based on actual operating data showing that more air is being recirculated than originally estimated.

Based on the above rationale, the Department concurs with the applicant's proposal to increase the clinker production rate and accepts the PM/PM₁₀ limits for the finish mill to be expressed in terms of pound per ton of finish mill feed (lb/ton feed_{FM}). However, because the vast majority of the pollutant emissions from the finish mill stack are particulate matter (compared with predominantly combustion gasses from the kiln stack), the Department believes that the current 5% opacity limit from the finish mill baghouse is appropriate and will not increase the opacity limit for this stack as requested.

Processing Schedule

04/15/2011 Received the application for a minor source air pollution construction permit.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- 04/25/2011 Meeting between a Department's representative and CEMEX's consultant (Koogler and Associates).
- 05/06/2011 Telephone and electronic correspondence with CEMEX's consultant.
- 05/09/2011 Telephone and electronic correspondence with CEMEX's consultant.
- 05/10/2011 Meeting between a Department's representative and CEMEX's consultant.
- 05/25/2011 Department distributed draft Intent to Issue package.

2. APPLICABLE REGULATIONS

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the F.A.C. The original Kiln 2 project was subject to the applicable rules and regulations defined in the following Chapters of the F.A.C.

Chapter	Description
<u>62-4</u>	Permits
<u>62-204</u>	Air Pollution Control – General Provisions
<u>62-210</u>	Stationary Sources of Air Pollution – General Requirements
<u>62-212</u>	Stationary Sources – Preconstruction Review
<u>62-213</u>	Operation Permits for Major Sources (Title V) of Air Pollution
<u>62-296</u>	Stationary Sources – Emission Standards
<u>62-297</u>	Stationary Sources – Emissions Monitoring

Federal Regulations

The original project was also subject to the applicable federal provisions regarding air quality as established by the Environmental Protection Agency (EPA) in the following sections of the Code of Federal Regulations (CFR).

Title 40, CFR	Description
Part 60	Subpart A - General Provisions for NSPS Sources NSPS Subpart F - Standards of Performance for Portland Cement Plants. NSPS Subpart Y - Standards of Performance for Coal Preparation Plants. NSPS Subpart OOO - New Source Performance Standards For Nonmetallic Mineral Processing Plants. Applicable Appendices
Part 63	NESHAP Subpart A - National Emission Standards for Hazardous Air Pollutants – General Provisions. NESHAP Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry.

PSD and BACT Applicability Review

The Department regulates major air pollution sources in accordance with Florida's PSD program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A "major stationary source" with respect to PSD is defined in Rule 62-210.200, F.A.C. (Definition 195) if it emits or has the potential to emit:

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

- 250 TPY or more of any regulated air pollutant, or
- 100 TPY or of any regulated air pollutant and the stationary source belongs to one of categories given in Rule 62-210.200(195)(a)1., F.A.C.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates (SER) listed in Rule 62-210.200(280)(a)1., F.A.C. Pollutant emissions from the project exceeding the respective SER are considered “significant” and the applicant must employ BACT to minimize emissions of each such pollutant and evaluate the air quality impacts.

The facility was a major stationary source prior to permitting of Line 2. The Line 2 project triggered the SER for NO_x, CO, SO₂, VOC and PM/PM₁₀. The applicant conducted ambient air quality modeling and the Department issued a BACT determination consisting of the controls and emission limits given in the original Line 2 permit (0530021-009-AC/PSD-FL-351).

Considering the proposed reductions in allowable emissions rates to offset the requested production increase, the requested revisions related to the production increase of Line 2 do not result in any significant emissions increases. The applicant believes this project is not subject to PSD preconstruction review.

Method of Estimating Emissions Increases and Decreases

As a major source, a physical modification or change in method of operation of this facility resulting in no significant net emissions increases is not subject to PSD review. It is clear that the production increase is a physical change or change in method of operation, because it involves relaxation of a federally enforceable production limit. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

Significant Net Emissions Increase – A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Rule 210.200, Regulated Air Pollutants – Significant Emission Rates.

The significant emission rates are included in Table 8. The meaning of a net emissions increase is given in Rule 62-210.200, F.A.C. as:

Net Emissions Increase - A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

The definition of actual emissions is given in Rule 62-210.200, F.A.C. (definitions) as follows:

Actual Emissions - The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

- In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
- The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.*
- For any emissions unit which has not begun normal operations on a particular date, actual emissions shall equal the potential emissions of the emissions unit on that date.*

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The Department does not consider the operation prior to 2011 to represent “normal operation under the present configuration and emission limits.” Therefore, the Department will not rely upon emissions that occurred during the two-year period as “representative of normal operations” described in paragraph (a) above.

The Department will rely on paragraph (b) above in estimating actual emissions and presumes that these are equal to the federally-enforceable emission limits allowed by the present permit. Future emissions will be calculated in accordance with part (c) above based on allowable emissions proposed by the Department for the facility in association with the requested production increase.

Proposed Emissions Limits

The following table lists the emission limits proposed by the Department for comparison with the previously listed allowable emission limits applicable to Line 2:

Table 8. Proposed Emissions and Net Emissions Changes for Cement Line 2.

Pollutant	Current Allowable Emissions		Proposed BACT Emissions Limits ²		Change from Allowable Emissions ¹	SER
	lb/ton clinker	TPY	lb/ton clinker	TPY	TPY	TPY
PM	0.23	214	0.185	192.7	-21.4	25
PM ₁₀	0.20	171	0.160	154.8	-16.3	15
SO ₂	0.23	128.7	0.185	120.2	-8.5	40
NO _x	1.95	1,106.6	1.56	1003.5	-103	40
CO	3.6	1,993	2.88	1841.9	-151	100
VOC/THC	0.12	68.7	0.096	61.7	-7	40
Mercury	122 lb/yr		122 lb/yr 41 µg/dscm		0 lb/yr	0.1 ton/yr

Notes:

¹ Net change comparing allowable annual emissions and PSD Significant Emission Rates (SER) listed in Rule 210.200, F.A.C. Total tons per year allowable emissions include emissions from the Finish Mill Air Heater.

² The proposed tons per year SO₂, NO_x, CO, and VOC emission rates include fuel oil combustion emissions from the finish mill air heater. The finish mill system will operate 7,500 hours per year. The Air Heater will operate 2,500 hours per year.

PSD and BACT Applicability Determination

The Department reviewed the continuous emission monitoring system (CEMS) records indicating emissions 25% less, or even lower, than the permitted emission rates. The Department concurs with CEMEX that Kiln 2 can comply with the present mass emission rate limitations in terms of pounds per hour (lb/hr) given in the PSD permit while producing 3,500 TPD. The Department concludes that Kiln 2 can and will be required to comply with 25% lower BACT limits in terms of lb/ton of clinker compared with the values given in the original permit.

CEMEX closed the two kilns at its nearby Brooksville North facility in 2008 due to economic reasons. The older and less efficient Line 1 at the Brooksville South Plant generally now operates when Line 2 does not. The ability to operate Line 2 at a higher daily rate will further reduce the need to operate Line 1 to provide marginal amounts of clinker in the present market. Operating at higher daily rates until stocks are full will generally be followed by longer periods of clinker production down time.

Under the present circumstances the Department has determined that Line 2 has not begun normal operations. Furthermore, the Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that such unit-specific allowable emissions limits are federally enforceable.

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Based on the foregoing, the Department concludes that there will not be an increase in any PSD pollutant equal to or greater than the respective significant emission rate (SER) as defined in the Department rules and the project is not subject to PSD review. Although a new BACT determination is not required, the revised limits proposed in conjunction with the production increase are all more stringent than previous BACT determinations for this Line (Line 2).

The Department notes this PSD applicability determination applies strictly to this project and the exact circumstances and does not constitute guidance for any other project. The Department makes these determinations on a case-by-case basis.

In addition to the production increases and corresponding reductions to the previous BACT-established allowable emissions rates, BACT for the material handling emission sources is changed to be the control of particulate matter emissions using baghouses to meet the opacity limits stated in the permit. These opacity limits are based on the manufacturer design specifications of 0.01 and 0.007 grains per dry standard cubic foot for PM and PM₁₀ emissions, respectively. Visible emissions from these sources shall not exceed 5 percent opacity, except that Emissions Unit 060 shall not exceed 10% opacity as determined in conjunction with the compliance demonstrations for the Line 2 kiln/raw mill/clinker cooler stack.

3. CHANGES TO PERMIT

This project is being processed as line-item changes to the previously issued conditions contained in permit No. 0530021-018-AC (PSD-FL-351C). The changes to the as-built permit are described in the project description and shown in the enclosed draft permit. They are generally highlighted in yellow (additions underlined or strikethrough deletions) and will be removed upon issuance of the final permit. The Department will incorporate directly into the permit the applicable updated 40 CFR 63, Subpart LLL in an attached Appendix.

4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the production increase 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 application, the limited 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 PSD-pollutant emissions. Teresa Heron is the project engineer responsible for reviewing the application and drafting the permit. Jon Holtom, P.E., is the Air Permitting Supervisor responsible for reviewing and editing the proposed permit modification. 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

PERMITTEE

CEMEX Construction Materials Florida, LLC
Brooksville South Cement Plant
10311 Cement Plant Road
Brooksville, Florida 32669

Permit No	0530021-033-AC (PSD-FL-351D) Cement Line No. 2
Project	Production Rate Increase
SIC No.	3241
Expires:	December 31, 2012

AUTHORIZED REPRESENTATIVE:

James Daniel, Plant Manager

PROJECT AND LOCATION

This is the final air construction permit authorizing the production increase of Cement Line 2. Line 2 is a recently constructed dry process preheater/precalciner kiln system with a cooler and associated material, fuel and product handling equipment. This project modifies and reissues the previous permit No. 0530021-018-AC (PSD-FL-351C), which it was based on the original permit No. 0530021-009-AC (PSD-FL-351) that authorized the construction of Line 2, to authorize an increase in the allowable production rates. In order to consistently operate at the increased production rates allowed by this permit revision at all raw material moisture content percentages, this permit also authorizes a minor equipment reconfiguration in the design of the raw mill material input feeder. The facility is located at 10311 Cement Plant Road, Hernando County. The UTM coordinates are: Zone 17; 360.0 km East and 3162.5 km North.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to perform the minor raw mill material input feeder design changes discussed in the application and to operate the emissions units in accordance with the revised conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

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)

Michael P. Halpin, P.E., Director
Division of Air Resource Management

(Date)

MH/tlv/jh/tmh

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.

- James S. Daniel, CEMEX: jdaniel@cemexusa.com
- George Townsend, CEMEX: gtownsend@cemexusa.com
- Lillian DePrimo, CEMEX: lillianf.deprimo@cemex.com
- John Koogler, P.E., Koogler & Associates: jkoogler@kooglerassociates.com
- Max Lee, P.E., Koogler & Associates: mlee@kooglerassociates.com
- Cindy Zhang-Torres, DEP SWD: cindy.zhang-torres@dep.state.fl.us
- David Hamilton, County Administrator, Hernando County: CountyAdministrator@hernandocounty.us
- Heather Abrams, EPA Region 4: abrams.heather@epa.gov
- Ana Oquendo, EPA Region 4: oquendo.ana@epamail.epa.gov
- Katy Forney, EPA Region 4: forney.kathleen@epamail.epa.gov
- Victoria Gibson, DEP BAR: victoria.gibson@dep.state.fl.us (for reading file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

SECTION I. FACILITY INFORMATION

FACILITY DESCRIPTION

The existing facility is an integrated facility that includes two Portland cement manufacturing lines, a 150 MW power plant, a coal yard and all required auxiliary equipment.

The CEMEX plant ownership comprises both Portland cement manufacturing lines; associated raw and product material handling activities; some coal handling activities and auxiliary equipment; as well as, all of the land designated as the Brooksville South facility.

The CP&L power plant ownership comprises the 150 MW coal power boiler; all limestone handling activities; as well as, some coal handling activities and auxiliary equipment. CP&L operates the power plant at the Brooksville South site under a lease agreement with CEMEX, which grants them access to the property and use of a shared baghouse and stack with CEMEX's Portland Cement Line 1.

PROJECT DESCRIPTION

This project is to increase the production capacity of Cement Line 2. Because the applicant proposed corresponding decreases to the emissions limitations to offset the requested production increase, this project will result in an overall decrease in allowable emissions in terms of lb/ton of clinker. The pound per hour (lb/hr) limits will remain unchanged and the tons per year (ton/yr) emissions are slightly reduced due to some units not operating continuously (7,500 hrs/year rather than 8,760 hrs/year). As a result, this project is not subject to a PSD review, even though the previously established BACT limitations will be altered.

The following reductions in emissions limits are proposed for the kiln stack (no change in the permitted average time):

NO_x emissions limit from 1.95 to 1.56 lbs of NO_x per ton of clinker (243.8 lb/hour),
SO₂ emissions limit from 0.23 to 0.185 pounds of SO₂ per ton of clinker (28.8 lb/hr),
PM emissions limit from 0.23 to 0.185 pounds of PM per ton of clinker (28.8 lb/hr),
PM₁₀ emissions limit from 0.20 to 0.160 pounds of PM₁₀ per ton of clinker (25.0 lb/hr),
CO emissions limit from 3.60 to 2.88 pounds of CO per ton of clinker (450 lb/hr), and
VOC emissions limit from 0.12 to 0.096 pounds of VOC per ton of clinker (15 lb/hr),

The following process rate increases are proposed (no change in the permitted average times):

Daily raw material and handling storage: from 225 to 246 tons /hr,
Annual raw material/ handling storage: from 1,971,000 to 2,154,960 tons/yr,
Hourly dry fly ash and preheater feed: from 206.3 to 258 tons/hr,
Daily dry fly ash and preheater feed: from 4,620 to 5,775 tons/day,
Annual dry fly ash and preheater feed: from 1,686,300 to 2,107,875 tons/yr,
Line 2 annual coal crushing limit: from 165,000 tons/yr to 175,200 tons/yr (error correction, no change),
Total heat input: from 390 to 490 million Btu/hr,
Propane: from 4,150 to 5,200 gallons per hour,
Whole tires heat input: from 117 to 147 million Btu/hr,
Natural gas: from 432,000 to 466,000 cubic feet per hour,
Distillate oil: from 3,080 to 3,600 gallons per hour,
Hourly clinker production: from 125 to 156 tons/hour,
Daily clinker production: from 2,800 to 3,500 tons/day,
Annual clinker production: from 1,022,000 to 1,277,500 tons/yr,
Hourly cement production: from 138 to 240 tons/hour (error correction, no change),
Daily cement production: from 5,760 to 5,760 tons/day (no change), and
Annual cement production: from 1,301,138 to 1,800,000 tons/yr.

Permit No. No.0530021-009-AC (PSD-FL-351) was issued to Portland Cement Line 2 in 2006. In 2010, this permit was modified to reflect the F.L. Smidth "as built" configuration by permit No. 0530021-018-AC (PSD-FL-351C). 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 oxide (NO_x) emissions are controlled by the use of Selective Non-catalytic Reduction (SNCR) technology. SO₂

SECTION I. FACILITY INFORMATION

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 carbon (VOC) emissions are controlled by promoting complete combustion in the kiln and calciner and minimizing carbon and oily content of raw materials. Particulate matter and particulate matter less than 10 microns (PM/PM₁₀) from the pyroprocessing system and the clinker cooler are controlled by large fabric filter baghouses. Mercury (Hg) 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 are used at the coal receiving area, the coal storage area, and the coal transfer system to control fugitive particulate matter emissions and minimize visible emissions. Continuous monitors are operated for opacity, NO_x, SO₂ and O₂. Fuels allowed to be used in the pyroprocessing system are natural gas, distillate fuel oil, on specification used oil, coal, petroleum coke, propane, flyash, and tire derived fuels.

PROJECT DETAILS

This permitting action is to modify and reissue permit No. 0530021-018-AC (PSD-FL-351C) which was based on original permit No. 0530021-009-AC (PSD-FL-351). This project is being processed as line-item changes to the previously issued conditions. Additions are shown with double underline formatting, while deletions are shown in ~~strikethrough~~ formatting. All changes are further highlighted in yellow for ease of identification throughout the draft permit. This formatting will be removed upon issuance of the final permit. The Department is also incorporating directly into the permit the applicable updated 40 CFR 63, Subpart LLL in an attached Appendix.

Emissions units addressed by this permit are:

EMISSIONS UNIT NO.	BAGHOUSE ID NO.	EMISSIONS UNIT DESCRIPTION
Process: Pyroprocessing System		
044	331.BF300	<u>In-line Raw Mill</u> , Kiln #2, Pre-Heater, Pre-Calciner, Clinker Cooler
Process: Raw Mill and Raw Meal Handling and Storage System		
045	331.BF640	Filter Dust Bin
	311.LS609	Filter Dust Bin Loadout Spout
046	341.BF400	Blend Silo
047	351.BF420	Kiln Feed Transport
	341.BF410	Blend Silo Discharge
	351.BF410	Kiln Feed Bin
Process: Clinker Handling and Storage		
048	471.BF110	Clinker Transport
050	471.BF120	Clinker Storage Silo
	481.BF155	Clinker Silo Discharge 1
	481.BF165	Clinker Silo Discharge 2
Process: Finish Mill System		
051	511.BF650	Finish Mill Additives
052	531.BF500	Finish Mill and Air Heater
054	531.BF020	Finish Mill Bucket Elevator
057	531.BF400	Finish Mill Cement Transport
	531.BF290	Finish Mill Rejects Transport
Process: Cement Silos & Loadout		
058	612.BF005	Cement Silo 5
	612.BF620	Cement Silo 5 Loading Bin
	622.LS140	Cement Silo 5 Loadout Spout N
	622.LS160	Cement Silo 5 Loadout Spout S
059	611.BF005	Multi Cell Cement Silo
	611.BF045	Multi Cell Cement Silo Alleviator
	611.BF610	Multi Cell Loadout Transport
	611.LS760	Multi Cell Loadout Spout

SECTION I. FACILITY INFORMATION

EMISSIONS UNIT NO.	BAGHOUSE ID NO.	EMISSIONS UNIT DESCRIPTION
060	461.BF400	Coal Mill
061	461.BF560	Fine Coal Bin
062	641.BF150	Packing Plant

The total annual air pollutant potential emissions in tons per year from Line 2 after the production increase are:

POLLUTANT	PSD SIGNIFICANCE LEVELS ¹ <u>SIGNIFICANT EMISSION RATES</u>	MAXIMUM EMISSIONS (TONS/YEAR)	<u>THIS PROJECT SUBJECT TO PSD REVIEW?</u> ¹
PM/PM ₁₀	25/15	214.09 / 171.06 <u>192.7/154.8</u>	Yes <u>No</u>
SO ₂	40	128.74 <u>120.2</u>	Yes <u>No</u>
NO _x	40	1106.6 <u>1,003.5</u>	Yes <u>No</u>
CO	100	1993 <u>1,841.9</u>	Yes <u>No</u>
VOC (Ozone)	40	68.7 <u>61.7</u>	Yes <u>No</u>
Mercury	200 pounds per year	122 pounds per year	No

1. ~~Significant Emission Rates~~ The original project was subject to PSD review, but the production increase is not.

REGULATORY CLASSIFICATION

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Rule 62-210.200 (Definitions), F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD).

The project was subjected to the provisions of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), because it is a modification to an existing facility.

The Department has determined this facility is a major source of hazardous air pollutants (HAPs) and is subject to 40 CFR 63, Subpart LLL, National Emissions Standard for Portland Cement Manufacturing (Subpart LLL).

The emissions units included in this project are subject to regulation under the New Source Performance Standards, 40 CFR 60 Subpart A, General Provisions, Subpart F, Standards of Performance for Portland Cement Plants, and Subpart Y Standards of Performance for Coal Preparation Plants. Some of these emissions units are also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359) and 40 CFR 63 Subpart A.

These emissions units are also subject to the requirements of the state rules as indicated in this permit, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration. Some emissions units are subject to Rule 62-296.407, F.A.C., Portland cement plants. Additionally the permit references the test methods of 40 CFR 60, Appendix A, Test Methods; 40 CFR 63, Appendix A, Test Methods; 40 CFR 51, Appendix M, Recommended Test Methods for State Implementation Plans; 40 CFR 61, Appendix B, Test Methods.

RELEVANT DOCUMENTS

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These and previous documents related to this permit are on file with the Department and can be accessible at the following link: <http://approd.dep.state.fl.us/air/emission/apds/listpermits.asp>.

- ~~• Original permit application and report for Line 2 received on December 20, 2004.~~
- ~~• EPA's comments received December 28, 2004 via email; No comments.~~
- ~~• Department's request for additional information on January 19, 2005.~~
- ~~• Applicant's additional information received March 7, 2005.~~
- Permit 0530021-009-AC (PSD –FL-351) issued on July 6, 2005.
- Permit Modification 0530021-012-AC (PSD –FL-351A) issued on August 2, 2005.

SECTION I. FACILITY INFORMATION

- ~~Permit Modification 0530021-015-AC (PSD –FL-351B) issued on September 9, 2008.~~
- ~~Permit Modification Application 0530021-018-AC (PSD-FL-315C) received on November 24, 2008.~~
- ~~Permit Extension Application 0530021-020-AC (PSD-FL-315C) received on April 13, 2008.~~
- ~~Applicant's additional information received on March 26, June 23 and October 6, 2009.~~
- ~~Draft Permit Modification 0530021-018-AC (PSD-FL-315C) distributed December 29, 2009.~~
- ~~Comments received from applicant received January 28, 2010.~~
- ~~Final Determination accompanying Final Permit Modification 0530021-018-AC (PSD-FL-315C).~~
- Permit Modification 0530021-018-AC (PSD –FL-351C) issued on February 18, 2010.
- Permit Modification Application 0530021-033-AC (PSD-FL-315D) received on April 15, 2011.
- Draft Permit Modification 0530021-033-AC (PSD-FL-315D) distributed in May 2011.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

The following specific conditions apply to all emissions units at this facility addressed by this permit.

1. Permitting Authority:

The permitting authority is the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850) 717-9000.

2. Compliance Authority: All documents related to operation, reports, tests, and notifications should be submitted to the Department of Environmental Protection's Southwest District Office at:

Department of Environmental Protection
Southwest District Office
13051 N Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600 Fax 813/632-7665

3. General Conditions: The owner and operator are subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rul  62-4.160, F.A.C.]
4. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
5. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit 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 Florida Administrative Code Chapters 62-4, 62-110, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Title 40, Part 60 and Part 63, adopted by reference in the Florida Administrative Code (F.A.C.) regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
6. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., 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.]
7. Expiration: This air construction permit shall expire on December 31, 2012. The permittee, for good cause, may request that this construction and PSD permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rules 62-210.300(1), 62-4.070(4), 62-4.080, and 62-4.210, F.A.C.]

PSD Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]

BACT Determination: In conjunction with extension of the 18 month periods to commence or continue construction, or extension of the permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for the source. [40 CFR 52.21(j)(4)]

8. Modifications: The permittee shall submit an application to the Department when there is any modification to this facility that would require a permit under State or Federal regulations. This application shall be

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]

9. Final Construction Schedule: The permittee shall provide to the Department a final construction schedule after selection of the contractor and before commencement of construction. [Rule 62-212.400(5)(h)2., F.A.C.]
10. General Visible Emissions Standard: Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer, or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20% opacity. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C. [Rule 62-296.320(4)(b)1, F.A.C.]
11. Unconfined Emissions of Particulate Matter:
- a. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
- b. Reasonable precautions include the following:
- Paving and maintenance of roads, parking areas and yards.
 - Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - Application of asphalt, water, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
 - Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - Landscaping or planting of vegetation.
 - Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - Confining abrasive blasting where possible.
 - Enclosure or covering of conveyor systems.

Additional reasonable precautions applicable to this facility are:

- All materials, except tires, coal and petroleum coke, at the plant shall be stored under roof on compacted clay or concrete, or in enclosed vessels.
- Water supply lines, hoses and sprinklers shall be located near all materials, coal and petroleum coke stockpiles.
- All plant operators shall be trained in basic environmental compliance and shall perform visual inspections of materials, coal and petroleum coke regularly and before handling. If the visual inspections indicate a lack of surface moisture, the materials, coal and petroleum coke shall be wetted with sprinklers. Such wetting shall continue until the potential for unconfined particulate matter emissions are minimized.
- Water spray shall be used to wet the materials and fuel if inherent moisture and moisture from wetting the storage piles are not sufficient to prevent unconfined particulate matter emissions.
- The manufacturing area and the access roadways for the facility shall be paved with asphalt or concrete.
- Vacuum Sweeper shall be used on paved roads.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

c. In determining what constitutes reasonable precautions for a particular source, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice. [Rule 62-296.320(4)(c), F.A.C.]

12. General Pollutant Emission Limiting Standards:

a. No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

b. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor.

[Rule 62-296.320(1)(a)&(2), F.A.C.]

[Note: An objectionable odor is defined in Rule 62-210.200(203), F.A.C., as any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.]

13. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All plant operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]

14. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department's district office. The notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]

15. Circumvention: No person shall circumvent any air pollution control device or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]

16. Excess Emissions: The following excess emissions provisions can not be used to vary any NSPS or NESHAP requirements from any subpart of 40 CFR 60 or 40 CFR 63.

Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up, shutdown, or malfunction shall be prohibited. [Rule 62-210.700, F.A.C.]

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

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

18. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
- a. Visible emissions, if there is an applicable standard;
- [Rule 62-297.310(7), F.A.C.]
19. Operating Rate During Testing: Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load 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. [Rule 62-297.310(2), F.A.C.]
20. Calculation of Emission Rate: 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.]
21. Applicable Test Procedures
- a. Required Sampling Time. 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. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (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 observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)1. and 2., F.A.C.]
- 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 (dscf). [Rule 62-297.310(4)(b), F.A.C.]
- 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. [Rule 62-297.310(4)(d), F.A.C.]
22. 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.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

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.]

23. Required Stack Sampling Facilities: Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E. Sampling facilities shall also conform to the requirements of Rule 62-297.310(6), F.A.C. [Rule 62-297.310(6), F.A.C.]
24. Test Notification: The owner or operator shall notify the Department's district office at least 15 days prior to the date on which each formal compliance test is to begin. Notification shall include 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)(a)9., F.A.C.]
- [Note: The owner or operator shall comply with all applicable timelines stated in 40 CFR 60.7, Notification and recordkeeping and 40 CFR 63.9, Notification Requirements.]
25. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
26. 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 five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department, upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
27. Test Reports: 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. 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. 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 Method 9 test, shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
28. Excess Emissions Report: If excess emissions occur, the owner or operator shall notify the Department within one working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. [Rule 62-4.130, F.A.C.]
29. Excess Emissions Report - Malfunctions: In case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report. A quarterly written report is hereby requested by the Department for every quarter that the facility is in operation. If no malfunctions occurred during a quarter, a written report stating that no malfunctions occurred shall be submitted. [Rule 62-210.700(6), F.A.C.]

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

30. Annual Operating Report for Air Pollutant Emitting Facility: The Annual Operating Report for Air Pollutant Emitting Facility shall be completed each year and shall be submitted to the Department's Southwest District office by April 1 of the following year. [Rule 62-210.370(3), F.A.C.]
31. Application for Title V Permit: This permit authorizes minor design changes to the raw mill material feeder and initial operation at the increased capacities to determine compliance with Department rules. A Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

SUBSECTION A. RAW MILL AND CLINKER PRODUCTION PROCESSES.

The following specific conditions apply to the following emissions units after construction:

EMISSIONS UNIT No.	FACILITY ID No.	EMISSIONS UNIT DESCRIPTION
044	331.BF300	<u>In-line Raw Mill</u> , Kiln #2, Pre-Heater, Pre-Calciner and Clinker Cooler

This emission unit is subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. This emission unit also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart A. These emissions units are also subject to the requirements of the state rules as indicated in this permit, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration. Emissions Unit 044 is subject to Rule 62-296.407, F.A.C., Portland Cement Plants.

STATE REQUIREMENTS

OPERATIONAL REQUIREMENTS

1. Hours of Operation: These units may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]
2. Fuels: Fuels fired in the pyroprocessing system (kiln and calciner) shall not exceed a total maximum heat input of ~~390,490~~ million Btu per hour (MMBtu/hr) and shall consist only of natural gas, coal, distillate oil, petroleum coke, flyash, on-spec oil, and whole tires. Propane may be fired and shall not exceed a maximum hourly rate of ~~4,150,200~~ gallons/hr.
 - a. Whole tires may be fired directly in the pyroprocessing system at a rate not to exceed a maximum heat input of 30% of the total pyroprocessing heat input, not to exceed ~~117,147~~ MMBtu/hr at any time. The remaining 70% of the total pyroprocessing heat input shall be derived from firing coal, flyash, petroleum coke, natural gas, propane or distillate oil. Whole tires fired in this manner shall be fed into the kiln system near the product end (hot side) of the kiln ~~or~~ at the transition section between the base of the precalciner and the point where gases exit the kiln; or anywhere in the calciner. The tire feeder mechanisms at the feed end (cold side) of the kiln and at the locations in the calciner shall be designed with a double airlock.
 - b. Coal and/or petroleum coke shall not exceed 20.0 tons per hour. Natural gas shall not exceed ~~432,000~~ 466,000 cf/hr. Distillate oil shall not exceed ~~3,080~~ 3,600 gallons/hr.

[Rules 62-4.070(3) and 62-210.200, F.A.C., Definitions -- potential to emit (PTE), F.A.C., and Applicant request, application received 12/20/04 and Permit Modifications 0530021-012-AC and 0530021-015-AC]
3. Fuels and Materials Not Allowed: The owner or operator shall not introduce hazardous wastes, petroleum contaminated soil or materials, used oil, oil fuels, or solid fuels other than those allowed by this permit, or solid wastes other than whole tires into any part of the process or emission control equipment. [Rule 62-4.070(3), F.A.C.]
4. Process Rate Limitations: The kiln shall not process more than ~~206.3~~ 258 tons per hour of dry preheater feed and dry flyash and shall not exceed ~~4,620~~ 5,775 tons in any 24-hour period (240.6 tons per hour, 24 hour average). The kiln shall not produce more than ~~125~~ 156 tons of clinker per hour, and ~~2,800~~ 3,500 tons in any 24-hr period (146 tons per hour, 24 hour average).

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Process and production rates shall be further limited to ~~1,686,300~~ 2,107,875 tons of dry preheater feed and dry flyash in any consecutive 12-month period (~~4620~~ 5,775 tons/day), and ~~1,022,000~~ 1,277,500 tons of clinker in any consecutive 12-month period (~~2800~~ 3,500 tons/day).

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

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

Where:

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

[Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]

~~5. Air Heater: Not constructed.~~

5. Cement Kiln Dust: Cement kiln dust shall be recirculated in the process and shall not be directly discharged from process or emission control equipment unless authorized by the Department. Cement kiln dust removed from process equipment during maintenance and repair shall be confined and controlled at all times and shall be managed in accordance with the applicable provisions of 40 CFR 261. [Rule 62-4.070(3), F.A.C.]
6. Whole Tire Management: Tires and tire derived fuel shall be stored, handled and managed in accordance with the provisions of Chapter 62-711, F.A.C. [Rule 62-4.070(3), F.A.C.]
7. O&M Plan for Baghouses and ESP: The owner or operator shall prepare an operation and maintenance plan (O&M plan) in accordance with 40 CFR 63, Subpart LLL. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Southwest District office prior to expiration of this permit. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.1350, Monitoring Requirements]

COMBUSTION AND PROCESS CONTROL TECHNOLOGY

8. Combustion and Process Control Technology: The owner or operator shall install selective noncatalytic reduction (SNCR). The owner or operator will also install multistage combustion (MSC) or equivalent system and utilize as needed to supplement the controls. The owner or operator shall use SNCR and/or MSC for control of NOx emissions. The owner or operator shall control emissions of CO and VOC through control of the combustion process. The owner or operator shall control emissions of SO₂ through design and control of the clinker production process. The owner or operator shall use hydrated lime injection or other control techniques when necessary to achieve the SO₂ emission limits. [Rules 62-4.070(3) and 62-212.400, F.A.C., and BACT]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

[Note: The emission limits for particulate matter and visible emissions imposed by Rule 62-212.400 and BACT are as stringent or more stringent than the limits imposed by the applicable NSPS or NESHAP rules. However, the BACT requirements do not waive or vary any monitoring or record keeping requirements of the NSPS and NESHAP rules.]

9. Mercury (Hg) into the Pyroprocessing System Limited: The total mass of mercury compounds introduced into the pyroprocessing system, expressed as Hg, in raw mill feed and fuels shall not exceed 122 pounds per consecutive 12-month period. [62-4.070(3), F.A.C.]
10. Performance Testing: The owner or operator shall notify the Department prior to initiating any significant change in the feed or fuel used in the most recent compliant performance test for D/F or PM. For purposes of this condition, significant means any of the following: a physical or chemical change in the feed or fuel; the use of a raw material not previously used; a change in the LOI of the flyash; a change between non-

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

beneficiated flyash and beneficiated flyash. Based on the information provided, the Department will promptly determine if performance testing pursuant to 40 CFR 63.1349 will be required for the new feed or fuel. A significant change shall not include switching to a feed/fuel mix for which the permittee already tested in compliance with the dioxin/furan and PM emission limits. [62-4.070(3), F.A.C.]

11. **Emissions Limits:** Emissions Unit 044 shall have one emission point, the stack of the Kiln #2, Pre-Heater, Pre-Calciner and Clinker Cooler designated by the permittee as 331.BF300. Particulate matter emissions from this emissions unit shall be controlled by a baghouse.

Emissions from this unit shall not exceed the following limits for the following pollutants upon the issuance date of this permit.

POLLUTANT	EMISSION LIMIT		AVERAGING TIME	BASIS
PM	0.136 <u>0.112</u> lb/ton of dry preheater feed; 0.23 <u>0.185</u> lb/ton of clinker	28.8 lb/hr	3 hours ³	BACT
PM ₁₀	0.118 <u>0.097</u> lb/ton of dry preheater feed; 0.20 <u>0.160</u> lb/ton of clinker	25.0 lb/hr	3 hours ³	BACT
SO ₂	0.23 <u>0.185</u> lb/ton of clinker	28.8 lb/hour	24 hours ⁴	BACT
NO _x	1.95 <u>1.56</u> lb/ton of clinker ¹	243.75 lb/hour ¹	30 day	BACT
CO	3.6 <u>2.88</u> lb/ton of clinker	450.0 lb/hour	24 hours ⁵	BACT
VOC	0.12 <u>0.096</u> 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
		122 lb/yr	Annual	Avoid PSD

- NO_x emissions shall not exceed 227 lbs/hr (24-hour average) until a production rate of 3,500 tons per day of clinker is reached. 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 day after initial startup. After 180 operating days after initial plant startup, e Emissions of NO_x shall not exceed the limits shown in the table once a clinker production rate of 3,500 tons per day is reached or June 30, 2012, whichever comes first.
- VOC emissions shall be expressed as propane.
- The averaging times for PM and PM₁₀ correspond to the required length of sampling for the initial and subsequent emission tests.
- The averaging time for SO₂ 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.
- ~~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.~~
- The averaging time for VOC shall be a 30-day block average specified in 40 CFR 63.1350(h).
- 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.
- 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; PM₁₀, 102.3; SO₂, 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.~~

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

These emission limits are based on ~~2,800~~ 3,500 tons per day and ~~1,022,000~~ 1,277,500 tons per year of clinker production. [Rules 62-4.070(3), 62-212.400, F.A.C., and BACT]

12. **Malfunction of the SNCR System:** Malfunction of the SNCR System is defined as any unavoidable mechanical and/or electrical failure that prevents introduction of ammonia based solutions into the kiln system. In accordance with the limits in condition 12, the exclusion of NO_x data collected during periods of malfunction and/or repair of the SNCR system is allowed when demonstrating compliance with the 30-day NO_x standard. No more than 6 hours per calendar day and no more than 30 hours in any 30-day operating block may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Southwest District of any malfunction of the SNCR system. [Rules 62-4.070(3), F.A.C.]
13. **Data Exclusion for CO:** In accordance with the limits in condition 12, the exclusion of CO data collected during periods of startup, shutdown, and malfunction of the kiln system is allowed when demonstrating compliance with the 24-hour lb/ton CO standard after the initial 180 day period after initial startup. No more than 7 hours per calendar day and no more than 28 hours in any calendar month may be excluded. Within one working day of the occurrence, the permittee shall notify the Department's Southwest District of any startup, shutdown, or malfunction of the system which an exclusion of data will occur. [Rules 62-4.070(3), F.A.C.]
14. **NSPS Particulate Matter and Visible Emissions Standards:** No owner or operator of a Portland Cement kiln shall cause, permit, or allow the emission of particulate matter in excess of 0.30 pounds per ton to the kiln (dry basis, excluding fuel), or visible emissions the density of which is greater than 20 percent opacity. [Rule 62-296.407, F.A.C.]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

15. **Continuous Emission Monitoring Systems:** The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the in-line kiln/raw mill stack to measure and record the emissions of NO_x, SO₂, CO and VOC from the in-line kiln/raw mill, in a manner sufficient to demonstrate compliance with the emission limits of this permit. Compliance with the emission limit for NO_x and the initial 30-day CO limit shall be based on a 30-day calendar rolling average that shall be recomputed daily from the individual hourly averages. Compliance with the emission limit for SO₂ and the 24-hour CO limits shall be based on a rolling 24-hour average that shall be recomputed every hour from the individual hourly averages for the current hour and the preceding 23 hours. Hourly averages shall be computed according to 40 CFR 60.13. Compliance with the 30-day emission limit for VOC shall be based on a 30-day block average that shall be computed from a minimum of one measurement every minute. The CEM system shall express the results in units of pounds per ton of clinker produced, and pounds per hour. [Rule 62-4.070(3), F.A.C., and BACT]
16. **Continuous Opacity Monitor (COM) and Continuous Emissions Monitors (CEM) Systems:** Continuous opacity monitor (COM) systems shall be installed, operated, and maintained at the kiln/raw mill baghouse stack pursuant to 40 CFR 63.1350. A continuous emission monitor for emissions of total hydrocarbon is required pursuant to 40 CFR 63.1349 and 63.1350. A continuous monitor for the temperature at the inlet to the in-line kiln/raw mill baghouse is required pursuant to 40 CFR 63.1349 and 63.1350.
17. **CEM System Requirements:** The selection, installation, calibration, maintenance, operation, record keeping, and reporting of the CEM system shall comply with the requirements of 40 CFR 60.7 and 60.13; 40 CFR 60 Appendix B, Performance Specifications; and, Appendix F, Quality Assurance Procedures. [Rules 62-4.070(3), 62-210.800 and 62-297.520, F.A.C., and BACT]

[Note: 40 CFR 60 Appendix B and Appendix F have been omitted for brevity. See the Code of Federal Regulations for the text of these sections.]

18. **Emission Tests Required:** In addition to the continuous monitoring requirements of this permit, the owner or operator shall demonstrate compliance with the visible emissions and PM/PM₁₀ emission limits of this permit for Emissions Unit 044 initially (within 60 days of being able to operate at a clinker production rate of 3,500

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

tons per day), and annually thereafter, using the test methods of 40 CFR 60 Appendix A and 40 CFR 61 Appendix B specified below. ~~The tests conducted annually for the relative accuracy test audit (RATA) for the CEM system may be used to satisfy this requirement provided the owner or operator satisfies the prior notification requirements and emission testing requirements of this permit for performance and compliance tests.~~

POLLUTANT	TEST METHOD
PM	Method 5 ¹
PM ₁₀	Method 5, assuming all PM measured is PM ₁₀
SO ₂	Method 6 or 6C
NO _x	Method 7 or 7E
VE	Method 9
CO	Method 10 or 10A
VOC	Method 25 or 25A
Hg	Method 29 or the Ontario Hydro Method for Subpart LLL Hg Tests

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

Each test shall be conducted while all continuous monitoring systems are functioning properly, and with all process units operating at their permitted capacity. [Rules 62-4.070(3), 62-296.701(4)(a), (c) and (d), and 62-297.310(7), F.A.C. and BACT]

19. Emissions Tests and Fuel Scenarios: Emission tests of Emissions Unit 044 shall be conducted for the pollutants in condition ~~221~~ upon initial operation under the fuel scenario representing the highest potential for generating emissions:

PRIMARY FUEL	SECONDARY FUEL
Coal	Whole tires directly into the pyroprocessing system, petroleum coke, and flyash

Subsequent annual testing under this fuel firing scenario is not required for any firing scenario that is used for less than 400 hours in the previous year, as documented by fuel firing records.

If all of the secondary fuels listed above are not available at the time of testing, the tests shall be based on the fuels that are available. If another secondary fuel becomes available in the future, additional tests shall be conducted with that fuel, if such tests are deemed necessary by the Department, before that fuel is used.

20. Long-Term Mercury Emissions Determination: Materials Balance testing in condition ~~221~~ will be used to determine mercury emissions. [Rules 62-4.070(3), 62-296.701(4)(a), (c) and (d), and 62-297.310(7), F.A.C. and BACT]

[Note: 40 CFR 60 Appendix A has been omitted for brevity. See the Code of Federal Regulations for the text of this section.]

21. Material Balance Analysis of Mercury: The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance and making and maintaining records of monthly and rolling 12-month mercury throughput. The owner or operator shall, for each month of sampling required by this condition, perform daily sampling of the raw mill feed, power plant ash, coal, petroleum coke, and tires, and shall composite the daily samples each month, and shall analyze the monthly composite sample to determine mercury content of these materials for the month. The owner or operator shall determine the mass of mercury introduced into the pyroprocessing system (in units of pounds per month) from the total of the product of the mercury content from the monthly composite analysis and the mass of each material or fuel used during the month. The consecutive 12-month record shall be determined from the individual monthly records for the current month and the preceding eleven months and shall be expressed in units of pounds of mercury per consecutive 12-month period. Such records shall be completed no later than 25 days following the month of the records.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

The permittee shall have the option of collecting, compositing, analyzing and calculating the Hg leaving the process via the dust permanently withdrawn from the pyroprocessing system. If the Hg concentration is below the detectable limit or limits of quantification, a value of zero will be assumed for the concentration in the dust. [Rule 62-4.070(3), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

22. Records of Process and Production Rates: The owner or operator shall make and maintain records of the process rate of dry preheater feed in units of tons per hour and tons per consecutive 12-month period, and the production rate of clinker and cement in units of tons per hour and tons per consecutive 12-month period. The owner or operator shall make and maintain records of the production of Portland cement in units of tons per consecutive 12-month period. Records in units of tons per hour shall be based on either hourly averages or daily averages and shall be completed no later than the day following the day of the record. Records in units of tons per consecutive 12-month period shall be made from monthly records of process and production rates for the past 12 months, and shall be completed no later than the 10th day of each following month. [Rule 62-4.070(3), F.A.C. and BACT]
23. Records of Fuels and Heat Input: The owner or operator shall record the fuel firing rate continuously. The owner or operator shall maintain records of the quantity and representative analysis of fuels purchased, and such records shall include the sulfur content, and heat content of the fuel for coal, petroleum coke, natural gas, fuel oil, propane, flyash, and whole tires. The records also shall include proximate and ultimate analyses.

The owner or operator shall make and maintain records of heat input to the pyroprocessing system on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel firing rate by the heating value representative of that fuel from the records of fuel analysis. Such records shall be completed for each block-hour, within 15 minutes of the end of each block-hour. [Rule 62-4.070(3), F.A.C.]
24. Records of Startup, Shutdown and Malfunction: The owner or operator shall make and maintain records of periods of startup, shutdown and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions. [Rule 62-4.070(3), F.A.C.]
25. Material Balance Records of Mercury: The owner or operator shall demonstrate compliance with the mercury throughput limitation by material balance as required by condition 22 and making and maintaining records of monthly and rolling 12-month mercury throughput. [Rule 62-4.070(3), F.A.C.]
26. Appendices: This emissions unit is subject to all applicable requirements of Appendices A, B, C and GC of this permit.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

SUBSECTION B. FINISH MILL AND MATERIAL HANDLING EQUIPMENT.

The following specific conditions apply to the following emissions units ~~after construction~~:

EMISSIONS UNIT NO.	BAGHOUSE ID NO.	EMISSIONS UNIT DESCRIPTION
Process: Raw Mix and Raw Meal Handling and Storage System		
045	331.BF640	Filter Dust Bin
	311.LS609	Filter Dust Bin Loadout Spout
046	341.BF400	Blend Silo
047	351.BF420	Kiln Feed Transport
	341.BF410	Blend Silo Discharge
	351.BF410	Kiln Feed Bin
Process: Clinker Handling and Storage		
048	471.BF110	Clinker Transport
050	471.BF120	Clinker Storage Silo
	481.BF155	Clinker Silo Discharge 1
	481.BF165	Clinker Silo Discharge 2
Process: Finish Mill System		
051	511.BF650	Finish Mill Additives
052	531.BF500	Finish Mill and Air Heater
054	531.BF020	Finish Mill Bucket Elevator
57	531.BF400	Finish Mill Cement Transport
	531.BF290	Finish Mill Rejects Transport
Process: Cement Silos & Loadout		
058	612.BF005	Cement Silo 5
	612.BF620	Cement Silo 5 Loading Bin
	622.LS140	Cement Silo 5 Loadout Spout N
	622.LS160	Cement Silo 5 Loadout Spout S
059	611.BF005	Multi Cell Cement Silo
	611.BF045	Multi Cell Cement Silo Alleviator
	611.BF610	Multi Cell Loadout Transport
	611.LS760	Multi Cell Loadout Spout
062	641.BF150	Packing Plant

These emissions units are subject to 40 CFR 60 Subpart F, Standards of Performance for Portland Cement Plants (40 CFR 60.60 – 60.66) and 40 CFR 60 Subpart A. These emissions units are also subject to 40 CFR 63 Subpart LLL, National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Industry (40 CFR 63.1340 – 63.1359), adopted by reference into Rule 62.204.800, F.A.C. and 40 CFR 63 Subpart A. These emissions units are also subject to the requirements of the state rules as indicated in this permit, particularly Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.

~~[The numbering of the original federal rules in the following conditions has been preserved for ease of reference. Inapplicable paragraphs have been omitted for clarity and brevity. The term "Administrator" when used in 40 CFR 60 shall mean the Secretary of the Department or the Secretary's designee.]~~

OPERATIONAL REQUIREMENTS

1. Hours of Operation: Emissions Units 050, 051, 052, 054 and 057 are restricted to operate 7,500 hours per year. The other emissions units listed in this Subsection may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]
2. Process Rate Limitation: The finish mill (EU 052) shall not process more than 240 tons per hour of finish mill feed (feed_{FM}) and 1,800,000 tons annually. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]
3. O&M Plan for Baghouses: Particulate matter emissions from each emission unit shall be controlled by a baghouse. The owner or operator shall prepare an operation and maintenance plan (O&M Plan) for these emissions units in accordance with 40 CFR 63, Subpart LLL. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Southwest District office prior to expiration of this permit. [Rule 62-4.070(3), F.A.C. and 40 CFR 63.1350, Monitoring Requirements]
4. Air Heater: The permittee may install an air heater associated with the Finish Mill at Emissions Unit 052.
 - a. The maximum heat input of the air heater shall be limited to 45 MMBtu/hr.
 - b. The operation of the air heater shall be limited to 2,500 hours per year.
 - c. The air heater may be fired only with propane and maximum 0.05% sulfur distillate oil.[Application and Rule 62-212.400, F.A.C. (BACT)]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

5. Emission Limits for Material Handling Operations Particulate Matter Emissions: Particulate matter (PM) emissions from these emissions units shall not exceed 0.01 grains/dscf, and PM₁₀ emissions shall not exceed 0.007 grains/dscf. Particulate matter emissions from each emission point of this the emissions units in this subsection shall be controlled by a baghouse which shall be installed, operated and maintained to meet a design specification of 0.01 grains/dscf for PM and 0.007 grains/dscf for PM₁₀ emissions. Visible emissions from each emission point of this the material handling emissions units shall not exceed 5% opacity (no visible emissions).

Emissions of NO_x, SO₂, CO and VOC will be controlled by Emissions Units 044 and 052.

With the exception of Emissions Unit 052, initial and annual compliance testing for PM and PM₁₀ emissions from these emissions units is waived, and an alternative standard of 5% opacity (no visible emissions) is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400 and 62-297.620(4), F.A.C., 40 CFR 63.1348; BACT and applicant request]

6. Material Handling Visible Emissions Limits: Emissions from the following emissions units shall not exceed the following limits for the following pollutants:

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

EMISSIONS UNIT	BAGHOUSE ID No.	EMISSION LIMIT PM/PM ₁₀ (LB/HR)	AVERAGING TIME ¹	OPACITY (%) ²
Process: Raw Mix and Raw Meal Handling and Storage System				
045	331.BF640	0.60/0.42	3 hours	5
	311.LS609			
046	341.BF400	0.55/0.39	3 hours	5
047	341.BF410	2.64/1.84	3 hours	5
	351.BF410			
	351.BF420			
Process: Clinker Handling and Storage				
048	471.BF110	0.22/0.15	3 hours	5
050	481.BF155	0.99/0.70	3 hours	5
	481.BF165			
	471.BF120			
Process: Finish Mill System				
051	511.BF650	0.57/0.40	3 hours	5
052 ³	531.BF500	8.57/6.0 - 6.86/4.80	3 hours	5
054	531.BF020	0.60/0.42	3 hours	5
057	531.BF400	0.44/0.31	3 hours	5
	531.BF290			
Process: Cement Silos & Loadout				
058	612.BF005	0.95/0.65	3 hours	5
	612.BF620			
	622.LS140			
	622.LS160			
059	611.BF005	0.78/0.54	3 hours	5
	611.BF045			
	611.BF610			
	611.LS760			
062	641.BF150	1.17/0.82	3 hours	5

¹-The averaging times for PM and PM₁₀ correspond to the required length of sampling for the initial and subsequent emission tests.

²-The averaging time for visible emissions shall be a 6 minute block average computed from a minimum of one measurement every 15 seconds. The 6 minute block averages shall start at the beginning of each hour.

³-The limits for the Finish Mill (E.U.052) are based on 240 tons per hour of finish mill feed. The lb/hr limits listed above are equivalent to PM/PM₁₀ limits of 0.029/0.020 lb/ton of finish mill feed (lb/ton feed_{FM}).

⁴-Manufacturer Design Specifications. These are not permit limits.

[Rules 62-4.070(3), 62-210.700(5) and 62-212.400, F.A.C., and BACT]

[Note: The applicant advised that the baghouses are designed to control PM/PM₁₀ to 0.01 grains/dry standard cubic foot (gr/dscf) and 0.007 gr/dscf, respectively. The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM₁₀ for all these emission unit systems will be less than 66.5/46.5 TPY, respectively. This annual emission estimate is the proposed PM/PM₁₀ for all these units and there is a reduction from the particulate matter potential emissions of the "as built" configuration project reviewed under permit No. 0530021-018-AC (PSD-FL-351C) (issued February 18, 2010). Exceedance of the 5% opacity limit shall be deemed an exceedance of the allowed BACT limit condition set in the original 2005 PSD permit (0530021-009-AC) and not necessarily an exceedance of the opacity limitations given in 40 CFR 63, Subpart LLL.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

6. Emission Limits and Test Requirements for Finish Mill and Air Heater – Emissions Unit 052:

This emissions unit shall comply with the following emission limits:

Pollutant	SO ₂	NO _x	CO	PM/PM ₁₀	Opacity
Mode	lb/hr	lb/hr	lb/hr	lb/hr lb/ton feed _{FM}	(%)
Air Heater On	2.1	30.92 5.40	17.84 1.50	8.6/6.0 0.029/0.020	5%
Air Heater Off	Not applicable	Not Applicable	Not Applicable	8.6/6.0 0.029/0.020	5%

~~Emissions of NO_x, SO₂, CO and VOC will be controlled by Emissions Units 044 and 052. [Rules 62-4.070(3) and 62-212.400, F.A.C. (BACT)]~~

TESTING REQUIREMENTS

7. Visible Emission Stack Tests Required: The owner or operator shall demonstrate compliance with the visible emission limits of this subsection for each baghouse annually, using the methods 9 specified in this subsection. [Rule 62-297.310(7)(a)4.a., F.A.C.]
8. Finish Mill and Air Heater Testing Requirements: ~~The finish mill shall be initially stack tested with the air heater off to determine initial compliance for PM/PM₁₀.~~ The finish mill shall be stack tested with the air heater on initially within 45 days of the issuance of this permit and once every five years annually thereafter to demonstrate ~~initial and annual~~ initial and annual compliance with the emission standards for CO, PM/PM₁₀, and NO_x and Compliance testing for visible emissions shall be conducted initially and annually, thereafter. Compliance with the SO₂ limit shall be demonstrated by compliance with the maximum 0.05% sulfur fuel limitation. ~~The tests shall be conducted before July 1, 2010.~~
9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Method for Determining Particulate Matter Emissions
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train.}
ASTM Methods	Compliance with the distillate fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur and including the value with the initial and annual test reports. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM methods D5453-00, D129-91, D1552-90, D2622-94, or D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor.

REPORTING AND RECORD KEEPING REQUIREMENTS

10. Notification, Recordkeeping and Reporting Requirements: The permittee shall maintain records of the amount of oil and propane used in the finish mill air heater. [Application and Rules 62-212.400, (BACT), 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
11. Appendices: These emissions units are subject to all applicable requirements of Appendices A, B, C and GC of this permit.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

SUBSECTION C. COAL HANDLING AND PROCESSING EQUIPMENT.

The following specific conditions apply to the following emissions units after construction:

EMISSIONS UNIT NO.	EMISSIONS UNIT DESCRIPTION
Process: Coal Mill Handling and Grinding System	
060	Coal Mill
061	Fine Coal Bin

Emissions Units 060 and 061 are subject to 40 CFR 60 Subpart Y, Standards of Performance for Coal Preparation Plants (40 CFR 60.250 – 60.254) and 40 CFR 60 Subpart A. Emissions from the coal mill (EU 060) are controlled by a baghouse that discharges through the Line 2 kiln/raw mill/clinker cooler stack. The emissions from the fine coal bin (EU 061) discharge through a separate baghouse and stack. These emissions units are also subject to the requirements of the state rules as indicated in this permit, particularly the requirements of Rule 62-212.400, F.A.C., Prevention of Significant Deterioration. Compliance with the state requirements assures compliance with the 40 CFR 60, Subpart Y requirements.

~~The numbering of the original rules in the following conditions has been preserved for ease of reference to the rules. Inapplicable paragraphs have been omitted for clarity and brevity. The term "Administrator" when used in 40 CFR 60 shall mean the Secretary or the Secretary's designee.]~~

STATE REQUIREMENTS

OPERATIONAL REQUIREMENTS

1. Hours of Operation: This emissions unit may operate continuously, i.e., 8,760 hours per year. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]
2. Process Rate Limitation: The coal mill shall not crush more than 20.0 tons per hour of coal and/or petroleum coke, 30-day average. The coal mill shall not crush more than ~~165,000~~ 175,200 tons annually. [Rule 62-210.200, F.A.C., Definitions -- potential to emit (PTE)]
3. O&M Plan for Baghouses: The owner or operator shall prepare an operation and maintenance plan (O&M Plan) for Emissions Unit 060. The O&M plan shall address the schedule for inspection of this equipment and required preventive maintenance and shall require records of the condition of the equipment upon each inspection and any maintenance activities performed. The O&M plan shall be submitted to the Department's Southwest District office prior to expiration of this permit. [Rule 62-4.070(3), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

4. Emissions Limits: The emissions units (and corresponding points) shall ~~havenot exceed~~ the following emission points~~limits~~:

EMISSIONS UNIT NO.	EMISSION POINT	DESCRIPTION	<u>OPACITY LIMIT</u>
060	461.BF400	Coal Mill	<u>10%</u>
061	461.BF560	Fine Coal Bin	<u>5%</u>

~~Particulate matter (PM) emissions from Emissions Unit 060 shall not exceed 0.01 grains/dscf (1.96 lb/hr), and PM₁₀ emissions shall not exceed 0.007 grains/dscf (1.37 lb/hr).~~

~~Particulate matter (PM) emissions from Emissions Unit 061 shall not exceed 0.01 grains/dscf (0.03 lb/hr), and PM₁₀ emissions shall not exceed 0.007 grains/dscf (0.02 lb/hr).~~

~~Particulate matter emissions from each emission point of this these emissions units shall be controlled by a baghouses which shall be installed, operated and maintained to meet a design specification of 0.01 grains/dscf for PM and 0.007 grains/dscf for PM₁₀ emissions. Visible emissions from each emission point of this emissions unit shall not exceed 5% opacity (observations for the initial compliance test shall be made for 3 hours (thirty 6-minute averages).~~

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Initial and annual compliance testing for PM emissions from each emissions unit is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5, as described in 40 CFR 60 Appendix A.

[Rules 62-4.070(3), 62-210.700(5), 62-212.400, and ~~62-297.620(4)~~, F.A.C., BACT]

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

5. Emission Tests Required: The owner or operator shall demonstrate compliance with the visible emissions standard for Emissions Unit 060 in conjunction with the compliance demonstrations for the Line 2 kiln/raw mill/clinker cooler stack. The owner or operator shall demonstrate compliance with the visible emissions standard for Emissions Unit 061 annually using EPA Method 9, as described in 40 CFR 60, Appendix A. ~~The owner or operator shall demonstrate initial compliance with the particulate matter (PM) limits of this permit for Emissions Unit 061 using EPA Method 5, as described in 40 CFR 60 Appendix A. Should subsequent particulate matter (PM) testing be required for both emissions units, compliance shall be demonstrated using EPA Method 5.~~ [Rules 62-4.070(3), 62-297.310 and ~~62-297.620(4)~~, F.A.C. and BACT]

REPORTING AND RECORD KEEPING REQUIREMENTS

6. Records of Process Rates: The owner or operator shall make and maintain records showing the monthly processing rate of coal and petroleum coke crushed in the coal mill. Records of the processing rate for each month shall be completed no later than 10 days following the end of the month. [Rule 62-4.070(3), F.A.C.]

FEDERAL NSPS REQUIREMENTS

APPLICABILITY AND DEFINITIONS

7. ~~Pursuant to 40 CFR 60.250 Applicability and Designation of Affected Facility:~~

~~(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 200 tons per day: Thermal dryers, pneumatic coal cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), and coal storage systems. [40 CFR 60.250]~~

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

8. ~~Pursuant to 40 CFR 60.252 Standards for particulate matter:~~

~~(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any thermal dryer gases which:~~

- ~~(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).
(2) Exhibit 20 percent opacity or greater.~~

~~(e) On and after the date on which the performance test required to be conducted by § 60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater. [40 CFR 60.252(a) and (e)]~~

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

9. ~~Pursuant to 40 CFR 60.253 Monitoring of operations:~~

~~(a) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:~~

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

~~(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within $\pm 3^{\circ}$ Fahrenheit.~~

~~(b) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under 40 CFR 60.13(b).~~

~~[40 CFR 60.253(a) and (b)]~~

~~10. Pursuant to 40 CFR 60.254 Test methods and procedures:~~

~~(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).~~

~~(b) The owner or operator shall determine compliance with the particular matter standards in § 60.252 as follows:~~

~~(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.~~

~~(2) Method 9 and the procedures in § 60.11 shall be used to determine opacity.~~

~~[40 CFR 60.254(a) and (b)]~~

11. Appendices: These emissions units are also subject to all applicable requirements of Appendices A, B, C, D and GC of this permit.

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions]

Pollutant (*Circle One*): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer and Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

Emission data summary ¹	CMS performance summary ¹
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown _____	a. Monitor equipment malfunctions _____
b. Control equipment problems _____	b. Non-Monitor equipment malfunctions _____
c. Process problems _____	c. Quality assurance calibration _____
d. Other known causes _____	d. Other known causes _____
e. Unknown causes _____	e. Unknown causes _____
2. Total duration of excess emissions _____	2. Total CMS Downtime _____
3. [Total duration of excess emissions] x (100) / [Total source operating time] % ²	3. [Total CMS Downtime] x (100) / [Total source operating time] % ²

¹ For opacity, record all times in minutes. For gases, record all times in hours.

² For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____

Title: _____

Date: _____

APPENDIX A. BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (ORIGINAL PROJECT)

Following is a summary of the Best Available Control Technology (BACT) determination for Line 2. The details are available in the original documents for permit No. 0530021-009-AC (PSD-FL-351), Appendix A, pages BD-1 through BD-19. In 2010, this BACT was revised to include requirements for the finish mill and heater in permit No. 0530021-018-AC (PSD-FL-351C). These documents are available at:

<http://arm-permit2k.dep.state.fl.us/psd/0530021/000013D3.pdf> and

<http://approd.dep.state.fl.us/air/emission/apds/listpermits.asp>

This BACT is modified by this permit to reflect the proposed production increase and the reduction of emissions based on lb/ton of clinker. Also, to include the new emissions format for the finish mill and heater PM/PM₁₀ limits expressed as lb/ton of finish mill feed (lb/ton feed_{FM}).

Emissions Unit 044 shall have one emission point, the stack of the Raw Mill, Kiln #2, Pre-Heater, Pre-Calciner and Clinker Cooler, designated by the permittee as 331.BF300. Particulate matter emissions from this emissions unit shall be controlled by a baghouse.

Emissions from this Unit shall not exceed the following limits for the following pollutants.

POLLUTANT	EMISSION LIMIT		AVERAGING TIME	BASIS
PM	0.136 <u>0.112</u> lb/ton of dry preheater feed; 0.23 <u>0.185</u> lb/ton of clinker	28.8 lb/hr	3 hours ³	BACT
PM ₁₀	0.118 <u>0.097</u> lb/ton of dry preheater feed; 0.20 <u>0.160</u> lb/ton of clinker	25.0 lb/hr	3 hours ³	BACT
SO ₂	0.23 <u>0.185</u> lb/ton of clinker	28.8 lb/hour	24 hours ⁴	BACT
NO _x	1.95 <u>1.56</u> lb/ton of clinker ¹	243.75 lb/hour ¹	30 day	BACT
CO	3.6 <u>2.88</u> lb/ton of clinker	450.0 lb/hour	24 hours ⁵	BACT
VOC	0.12 <u>0.096</u> lb/ton of clinker ²	15.0 lb/hour ²	30 days ⁶	BACT
VE	10% opacity		6 minutes ⁷	BACT

- NO_x emissions shall be controlled by a selective non-catalytic reduction (SNCR) system. ~~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 day after initial startup. After 180 operating days after initial plant startup, e~~ Emissions of NO_x shall not exceed the limits shown in the table.
- VOC emissions shall be expressed as propane.
- The averaging times for PM and PM₁₀ correspond to the required length of sampling for the initial and subsequent emission tests.
- The averaging time for SO₂ 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.
- ~~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.~~
- The averaging time for VOC shall be a 30-day block average specified in 40 CFR 63.1350(h).
- 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. The department will require the applicant to install continuous opacity monitoring systems (COMS) on the kiln's stack.

BACT for other enclosed the material handling emission sources will be control of particulate matter emissions using baghouses to meet the respective PM and PM₁₀ emission opacity limits stated in Subsections B and C of this permit. These opacity limits are based on the manufacturer design specifications of 0.01 and 0.007 grains per dry standard cubic foot for PM and PM₁₀ emissions, respectively. Visible emissions from these sources shall not exceed 5 percent opacity, except that Emissions Unit 060 shall not exceed 10% opacity as determined in conjunction with the compliance demonstrations for the Line 2 kiln/raw mill/clinker cooler stack.

APPENDIX A. BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (ORIGINAL PROJECT)

BACT for Emissions Unit 052 is the control of particulate matter emissions using a baghouse to meet respective PM and PM₁₀ emission limits of 0.029 and 0.020 lb/ton of finish mill feed (lb/ton feed_{FM}). Visible emissions from this unit shall not exceed 5 percent opacity.

BACT for unenclosed sources is generally control of particulate matter emissions by inherent or applied moisture. Unpaved roads will be sprayed with water to prevent unconfined particulate matter emissions. Material and fuel storage piles will be stored under roof or in enclosed vessels. Storage piles shall be shaped, compacted and oriented to minimize wind erosion. Storage piles shall be wetted with devices located near such piles when visual inspection determines wetting is needed. Paving of the manufacturing area and access roadways is required. Sweeping of paved road will be required.

BACT for the air heater located at the finish mill is use of propane and distillate fuel oil with a maximum sulfur content of 0.05 percent and filtration through the finish mill baghouse.

APPENDIX B. 40 CFR 60, SUBPART F AND 40 CFR 60, GENERAL PROVISIONS

1. Pursuant to 40 CFR 60, Subparts F and A:

The owner or operator shall comply with all applicable provisions of 40 CFR 60, Subparts F and A, which are available at the following links:

40 CFR 60, Subpart A

40 CFR 60, Subpart F

APPENDIX C. 40 CFR 63 SUBPART LLL AND 40 CFR 63, GENERAL PROVISIONS

1. Pursuant to 40 CFR 63, Subparts LLL and A:

The owner or operator shall comply with all applicable provisions of 40 CFR 63, Subparts LLL and A, which are available at the following links.

40 CFR 63, Subpart A

40 CFR 63, Subpart LLL

APPENDIX D. 40 CFR 60, SUBPART Y AND 40 CFR 60, GENERAL PROVISIONS

I. Pursuant to 40 CFR 60, Subparts Y and A:

The owner or operator shall comply with all applicable provisions of 40 CFR 60, Subparts Y and A, which are available at the following links.

40 CFR 60, Subpart A

40 CFR 60, Subpart Y

APPENDIX GC. GENERAL PERMIT CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 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 initiate enforcement 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 conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey and vested 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 a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may 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 penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, 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 (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the 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 comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance. 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 and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
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;
 - b. Determination of Prevention of Significant Deterioration; and
 - c. Compliance with New Source Performance 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 or 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:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) 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 that 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.

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Wednesday, May 25, 2011 10:12 AM
To: 'jdaniel@cemexusa.com'
Cc: 'gtownsend@cemexusa.com'; 'lillianf.deprimo@cemex.com'; 'mlee@kooglerassociates.com'; 'jkoogler@kooglerassociates.com'; Zhang-Torres; 'CountyAdministrator@hernandocounty.us'; 'forney.kathleen@epa.gov'; 'abrams.heather@epa.gov'; 'oquendo.ana@epa.gov'; Gibson, Victoria; Heron, Teresa; Holtom, Jonathan; Walker, Elizabeth (AIR)
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D
Attachments: 0530021-033-AC_Intent.pdf

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".

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

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0530021.033.AC.D_pdf.zip

Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-033-AC / PSD-FL-351D
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: HERNANDO
Processor: Jeff Koerner

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 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

Thanks,

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection

Livingston, Sylvania

From: Daniel, James S. (Jim) [JDaniel@cemexusa.com]
Sent: Wednesday, May 25, 2011 11:51 AM
To: Livingston, Sylvania
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

Received.



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



Please consider the environment before printing this email.

From: Livingston, Sylvania [<mailto:Sylvia.Livingston@dep.state.fl.us>]
Sent: Wednesday, May 25, 2011 10:12 AM
To: Daniel, James S. (Jim)
Cc: Townsend, George; Lillian F Deprimo; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; CountyAdministrator@hernandocounty.us; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; Gibson, Victoria; Heron, Teresa; Holtom, Jonathan; Walker, Elizabeth (AIR)
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

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Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC

Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT

Project Number: 0530021-033-AC / PSD-FL-351D

Permit Status: DRAFT

Permit Activity: CONSTRUCTION

Facility County: HERNANDO

Processor: Jeff Koerner

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Thanks,

Sylvia Livingston
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/717-9043 (New Phone)
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.

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Livingston, Sylvania

From: Townsend, George [gtownsend@cemexusa.com]
Sent: Wednesday, May 25, 2011 10:59 AM
To: Livingston, Sylvania
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

Information is received and is available

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

Please consider the environment before printing this email.

-----Original Message-----

From: Livingston, Sylvania [<mailto:Sylvia.Livingston@dep.state.fl.us>]
Sent: Wednesday, May 25, 2011 10:12 AM
To: Daniel, James S. (Jim)
Cc: Townsend, George; Lillian F Deprimo; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; CountyAdministrator@hernandocounty.us; forney.kathleen@epa.gov; abrams.heather@epa.gov; oguendo.ana@epa.gov; Gibson, Victoria; Heron, Teresa; Holtom, Jonathan; Walker, Elizabeth (AIR)
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

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Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC

Facility Name: CEMEX BROOKSVILLE S. CEMENT and POWER PLANT
Project Number: 0530021-033-AC / PSD-FL-351D
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Thanks,

Sylvia Livingston

Division of Air Resource Management (DARM)

Department of Environmental Protection

850/717-9043 (New Phone)

sylvia.livingston@dep.state.fl.us

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Livingston, Sylvia

From: John Koogler [jkoogler@kooglerassociates.com]
Sent: Wednesday, May 25, 2011 10:34 AM
To: Livingston, Sylvia
Subject: RE: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

Thank you

John B. Koogler, Ph.D., P.E.
Koogler and Associates, Inc
4014 NW 13th St.
Gainesville, FL 32609
Off: 352 377 5822
Cell: 352 317 8319



From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, May 25, 2011 10:12 AM
To: jdaniel@cemexusa.com
Cc: gtownsend@cemexusa.com; lillianf.deprimo@cemex.com; mlee@kooglerassociates.com; jkoogler@kooglerassociates.com; Zhang-Torres; CountyAdministrator@hernandocounty.us; forney.kathleen@epa.gov; abrams.heather@epa.gov; oquendo.ana@epa.gov; Gibson, Victoria; Heron, Teresa; Holtom, Jonathan; Walker, Elizabeth (AIR)
Subject: CEMEX Construction Materials, LLC - Brooksville South Cement and Power Plant; 0530021-033-AC/ PSD-FL-351D

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Owner/Company Name: CEMEX CNSTRCTION MATERIALS FLORIDA, LLC
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