



# Department of Environmental Protection

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MAY 21 2012

## Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

DIVISION OF AIR  
RESOURCE MANAGEMENT

### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

**Air Operation Permit** – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: <b>CEMEX Construction Materials Florida, LLC</b>	
2. Site Name: <b>Brooksville South Cement Plant</b>	
3. Facility Identification Number: <b>0530021</b>	
4. Facility Location... Street Address or Other Locator: <b>10311 Cement Plant Road</b> City: <b>Brooksville</b> County: <b>Hernando</b> Zip Code: <b>34601</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>John B. Koogler, Ph.D, P.E</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>Koogler and Associates, Inc.</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>Florida</b> Zip Code: <b>32609</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(352)- 377- 5822</b> ext. <b>18</b> Fax: <b>(352)-377-7158</b>	
4. Application Contact E-mail Address: <b>jkoogler@kooglerassociates.com</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application: <b>5-21-12</b>	3. PSD Number (if applicable):
2. Project Number(s): <b>0530021-043-AC</b>	4. Siting Number (if applicable):

**APPLICATION INFORMATION**

**Purpose of Application**

**This application for air permit is being submitted to obtain: (Check one)**

**Air Construction Permit**

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

**Air Operation Permit**

- Initial Title V air operation permit.
- Title V air operation permit revision.
- Title V air operation permit renewal.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

**Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- Air construction permit and Title V permit revision, incorporating the proposed project.
- Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

**Application Comment**

**This application is for the repermitting of existing CEMEX Portland cement Kiln No. 1 and Kiln No. 2 as a facility separate from the Central Power and Lime power plant. The two facilities (the cement plant and the power plant) have been permitted as a single facility with Facility ID Number 0530021 since originally permitted in the mid-1980s. Most recently they have operated under Permit No. 0530021-029-AV, effective 12/29/2011. Recently (01/24/2012) FDEP issued Permit 0530380-001-AC to Florida Power Development, LLC (FPD) to convert the power plant to a stand-alone biomass fired power plant. This application is for a stand-alone AC permit for the CEMEX Brooksville South Cement Plant consisting of existing Kiln Nos. 1 and 2 and the associated activities described herein. There will be no cement plant modifications\* or changes in emissions as a result of this project.**

\*Note, a new stack may be constructed for Kiln No. 1 replacing the stack the Kiln previously shared with the power plant, the Kiln No. 1/CPL baghouse may be replaced with a smaller

## **APPLICATION INFORMATION**

baghouse sized for Kiln No. 1 and the duct from the Kiln No. 1 Clinker Cooler to the Kiln No. 1/Clinker Cooler baghouse will be rerouted so that the duct will no longer pass thru the CPL Power Plant.

The potential replacement of the Kiln No. 1 stack and baghouse are addressed herein. Air Quality Modeling was submitted the Department on 4/20/2012 demonstrating that the proposed Kiln No. 1 stack replacement will not result in a violation of the 1-hour NO<sub>x</sub> NAAQS. SO<sub>2</sub> emissions from Kiln No. 1 and nearby contributing sources are much lower than NO<sub>x</sub> emissions from these same sources. Thus, if the modeling demonstrated compliance with the 1-hour NO<sub>x</sub> NAAQS, it follows by reason that there will be compliance with the 1-hour SO<sub>2</sub> NAAQS. Note that the potential stack replacement will have no effect on Kiln No. 1 production capacity or emissions.

The potential replacement of the Kiln No. 1/CPL Power Plant baghouse with a baghouse sized for Kiln No. 1 and the Kiln No. 1 Clinker Cooler will be a replacement with a baghouse of similar design (reverse air), similar bag material (fiberglass) and a similar air/cloth ratio (2.1/1.0). This change, if implemented will not affect the production capacity of Kiln No. 1 or the emissions from the kiln.

The Kiln No. 1 Clinker Cooler duct rerouting is a structural activity required by the separation of Kiln No. 1 and the CPL Power Plant and should require no permitting. The Department is hereby notified of this planned action.

**APPLICATION INFORMATION**

**Scope of Application**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
<b>Brooksville South Cement Plant Kiln No. 1</b>			
<b>001/D-75</b>	<b>Filter Dust Bin with Baghouse</b>		<b>NA</b>
<b>002/D-67</b>	<b>Fly Ash/Equilibrium Catalyst Bin with Baghouse</b>		
<b>004/F-14</b>	<b>Raw Meal Transfer with Baghouse</b>		
<b>006/G-12 (A &amp; B)</b>	<b>Two Blend Silos with Baghouse</b>		
<b>007/H-15</b>	<b>Kiln Feed Surge Bin with Baghouse</b>		
<b>008/S-04</b>	<b>Clinker Receiving/Handling System</b>		
<b>009/K-07 &amp; L-03</b>	<b>Clinker Cooler Discharge with Baghouse</b>		
<b>010/L06 to L05 &amp; L07</b>	<b>Clinker Storage Silos with Baghouse</b>		
<b>011/L-08</b>	<b>Gypsum and Limestone Bins with Baghouse</b>		
<b>012/M-08</b>	<b>Silo Discharge with Baghouse</b>		
<b>013/N-13</b>	<b>Finish Mill with Baghouse</b>		
<b>014/Q-17</b>	<b>A-side Cement Storage Silos Nos. 1 &amp; 2 Discharge System with Baghouse</b>		
<b>015/Q-15</b>	<b>Cement Storage Silos Nos. 1 &amp; 2 with Baghouse</b>		
<b>019/M-05</b>	<b>Finish Mill feed belt with Baghouse</b>		
<b>020</b>	<b>Cement Kiln-I, In-line Kiln/Raw Mill and Clinker Cooler I with Baghouse</b>		
<b>021/Q-18</b>	<b>B-side Cement Storage Silos 1,2 &amp; 3 with Discharge system with Baghouse</b>		
<b>Note: EU-017, Iron ore Bin and baghouse was removed from service in 2009</b>			

**APPLICATION INFORMATION**

<b>Emissions Unit ID Number</b>	<b>Description of Emissions Unit</b>	<b>Air Permit Type</b>	<b>Air Permit Processing Fee</b>
022/Z-15	Cement Storage Silo # 3 with Baghouse		NA
023	Cement Storage Silo # 4 with Truck Loadout system with Baghouse		
024/Z-18	Cement Storage silo and Railcar Loadout system with Baghouses		
<b>Brooksville South Cement Plant Kiln Nos. 1 and 2 – Coal Yard &amp; Fugitive Emissions</b>			
042	Coal Receiving, Handling and Transfer System (Fugitives)		NA
	Facility wide Fugitive Emissions		
<b>Brooksville South Cement Plant Kiln No. 2</b>			
044	Kiln No. 2/Preheater/Precalciner/Clinker Cooler/Air Heater		N/A
045	Filter Dust		
046	Raw Meal Transport		
047	Kiln Feed Transport		
048	Clinker Transport		
050	Clinker Storage		
051	Finish Mill Collecting Bin		
052	Finish Mill		
054	Bucket Elevator		
057	Cement Transport		

**APPLICATION INFORMATION**

<b>058</b>	<b>Cement Loadout Bin</b>	
<b>059</b>	<b>Cement Loadout Bin</b>	
<b>060</b>	<b>Coal Mill</b>	
<b>061</b>	<b>Fine Coal Bin</b>	
<b>062</b>	<b>Packing Plant</b>	

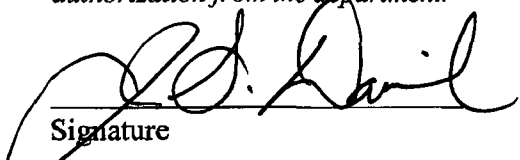
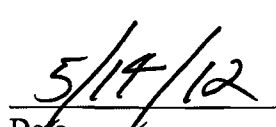
**Application Processing Fee**

Check one:  Attached - Amount: \$ \_\_\_\_\_  Not Applicable

**APPLICATION INFORMATION**

**Owner/Authorized Representative Statement**

**Complete if applying for an air construction permit or an initial FESOP.**

1. Owner/Authorized Representative Name : <b>Jim Daniel ,Cement Plant Manager</b>
2. Owner/Authorized Representative Mailing Address... Organization/Firm: <b>Street Address: 10311 Cement Plant Road</b> <b>City: Brooksville State: Florida Zip Code: 34601</b>
3. Owner/Authorized Representative Telephone Numbers... <b>Telephone: (352)799-7881 ext. Fax: (352) 540 -4794</b>
4. Owner/Authorized Representative E-mail Address: <b>jdaniel@cemexusa.com</b>
5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>   Signature   Date

**APPLICATION INFORMATION**

**Application Responsible Official Certification**

**Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”**

1. Application Responsible Official Name: NA
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: ext. Fax:
5. Application Responsible Official E-mail Address

**Professional Engineer Certification**



**APPLICATION INFORMATION**

1. Professional Engineer Name: <b>John B. Koogler, Ph.D, P.E</b> Registration Number: <b>12925</b>		
2. Professional Engineer Mailing Address... Organization/Firm: <b>Koogler &amp; Associates</b> Street Address: <b>4014 NW 13<sup>th</sup> Street</b> City: <b>Gainesville</b> State: <b>FL</b> Zip Code: <b>32609</b>		
3. Professional Engineer Telephone Numbers... Telephone: <b>(352)377 - 5822</b> ext. <b>18</b> Fax: <b>(352)- 377-7158</b>		
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/> if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input checked="" type="checkbox"/> if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>		
Signature _____ (seal)		Date <u>5/18/2012</u>

\* Attach any exception to certification statement.