Florida Department of Environmental Protection

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Interim Secretary

PERMITTEE

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

Authorized Representative:
Alberto Calleros, Plant Manager

Air Permit No. 0530021-066-AC
Expires: 12/31/2017
Brooksville South Cement Plant
Facility ID No. 0530021
Cement Line 1 (Kiln 1) Coal Mill Booster Blower
Hernando County

PROJECT

This is the final air construction permit to authorize the addition of a booster blower to support the coal mill for Cement Line 1, relocate the hot gas takeoff point on the Cement Line 1 clinker cooler and replace the fan wheel (the impeller) of the Cement Line 1 induction fan. The proposed work will be conducted at the existing Brooksville South Cement Plant, which is categorized under Standard Industrial Classification No. 3241. The existing facility is in Hernando County at 10311 Cement Plant Road in Brooksville, Florida. The UTM coordinates are Zone 17, 360.00 kilometers (km) East and 3162.50 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

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

Executed in Tallahassee, Florida

David Lyle Read, P.E.
2017.04.07 07:51:11 -04'00'

For:

Syed Arif, P.E., Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Construction Permit package 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 the date indicated below to the following persons.

Alberto Calleros, CEMEX: (alberto.calleros@cemex.com)
Lillian Deprimo, CEMEX: (lillianf.deprimo@cemex.com)
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Southwest District: (SWD_Air_Permitting@dep.state.fl.us)
Ms. Lynn Scearce, DEP OPC: (lynn.scearce@dep.state.fl.us)

Clerk Stamp

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

Lynn Scearce

2017.04.07 07:57:02 -04'00'

FACILITY DESCRIPTION

The Brooksville South cement plant includes two Portland cement manufacturing lines (Line Nos. 1 and 2), a coal yard and all the required auxiliary equipment. The plant combines raw materials and utilizes a preheater/precalciner kiln with in-line raw mill to produce clinker. The clinker is milled and combined with gypsum to produce Portland cement. Line 1 is a dry Gepol preheater in-line kiln/raw mill, clinker cooler arrangement. Line 2 is a dry preheater/precalciner process. The kiln has an in-line calciner and an in-line arrangement with the raw mill. Annual clinker production is limited to 727,800 tons and 1,227,500 tons in Lines 1 and 2, respectively.

The existing facility consists of the following emissions units.

Brooksville South Portland Cement Line 1 - *Regulated Emissions Units*		
EU ID No.	**Facility's Internal ID No.**	**Brief Description**
001	D-75	Filter Dust Bin (was Pre-Mix Bin) with Baghouse
002	D-67	Fly Ash/Equilibrium Catalyst Storage Silo with Baghouse
004	F-14	Raw Meal Transfer with Baghouse
006	G-12 (A & B)	Two Blend Silos with Baghouse
007	H-15	Kiln Feed Surge Bin with Baghouse
008	S-04	Clinker Receiving/Handling System
009	K-07 & L-03	Clinker Cooler Discharge with Baghouse
010	L-05, L-06 & L-07	Clinker Storage Silos with Baghouse
011	L-08	Gypsum and Limestone Bins (was Clinker Silo) with Baghouse
012	M-08 M-04	EP-01 Silo Discharge with Baghouse (M-08) and EP-02 Clinker Feeder Baghouse (M-04).
013	N-13	Finish Mill with Baghouse
014	Q-17	A-Side Cement Storage Silos #1 & #2 Discharge System with Baghouse
015	Q-15	Cement Storage Silos #1 & #2 with Baghouse
019	M-05	Finish Mill Feed Belt with Baghouse
020		Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1 with Baghouse
021	Q-18	B-Side Cement Storage Silos #1, #2 & #3 Discharge System with Baghouse
022	Z-15	Cement Storage Silo #3 with Baghouse
023		Cement Storage Silo #4 and Truck Loadout System with Baghouse
024	Z-18	Cement Storage Silo and Railcar Loadout System with Baghouses
064	M03	Kiln No. 1 Clinker Belt Dust Control
Brooksville South Portland Cement Plant 2 - *Regulated Emissions Units*		
EU ID No.	**Baghouse ID No.**	**Brief Description**
Pyroprocessing System		
044	331.BF300	Kiln, In-line Raw Mill, Pre-Heater, Pre-Calciner and Clinker Cooler No. 2
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
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
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 Finish Mill Rejects Transport
Cement Silos and 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
Other		
Not Numbered		Alternative Fuel Handling and Processing
060	461.BF400	Coal Mill
061	461.BF560	Fine Coal Bin
062	641.BF150	Packing Plant
063	N/A	Emergency Diesel Generator
Brooksville South Portland Cement Line 1 and Portland Cement Line 2		
042	N/A	Coal Receiving, Handling and Transfer System (fugitives)
Not Numbered		Facility wide Fugitive Emissions

PROPOSED PROJECT

CEMEX Construction Materials Florida, LLC (CEMEX) applied for an air construction permit to add a booster blower to support the coal mill for Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1 with Baghouse (EU 020). Also as part of the coal mill project, CEMEX plans to relocate the hot gas takeoff point on the clinker cooler to provide hotter gases to the coal mill. Finally, CEMEX plans to replace the fan wheel (the impeller) of the Kiln 1 induction (ID) fan (identified as fan K-13) that is used to pull gas through the Kiln 1 system.

The following existing emissions units (EU) will be affected by this project.

EU No.	Description
020	Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1 with Baghouse

FACILITY REGULATORY CLASSIFICATION

- The facility is a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility operates units subject to the New Source Performance Standards (NSPS) of Title 40, Part 60, of the Code of Federal Regulations (CFR).
- The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southwest District at: 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926..

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

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

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

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

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. EU 020, Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1 with Baghouse

This section of the permit addresses the following emissions unit.

EU No.	Description
020	Cement Kiln 1, In-Line Kiln/Raw Mill and Clinker Cooler 1 with Baghouse

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of previously issued permits are still valid. This permit sole purpose is to authorize the work described in **Specific Conditions 2**, **3** and **4** below with regards to EU 020. No production increase or changes of any emission limit with regards to EU 020 are authorized by the permit. [Rule 62-4.070, F.A.C.]

CONSTRUCTION/REPLACEMENT

2. Coal Mill Booster Blower: The permittee is authorized to install, operate and maintain a booster blower on the coal mill for Kiln 1. No increase in the airflow rate or the coal delivery rate to the Kiln 1 burner is authorized because of the installation of the booster blower. [Application No. 0530021-066-AC]

3. Relocate Hot Gas Takeoff Point on Clinker Cooler: The permittee is authorized to relocate the hot gas takeoff point on the clinker cooler from a location near the discharge end of the cooler to a location near the inlet of the cooler. No increase in the flow rate (volume) of hot air from the clinker cooler to the coal mill is authorized due to the relocation of the hot gas takeoff point. [Application No. 0530021-066-AC]

4. Induction (ID) Fan Wheel (the impeller) Replacement: The permittee is authorized to replace the Kiln 1 ID fan wheel (impeller). The replacement shall be a like kind replacement as compared to the typical historic operation of the ID fan. No increase in clinker production shall occur because of the fan wheel replacement. [Application No. 0530021-066-AC]

NOTIFICATION

5. Notification: The permittee shall notify the compliance authority 5 business days prior to starting any of the work authorized in **Specific Conditions 2**, **3** and **4** above. [Rules 62-4.070(1) and (3) and 62-4.080, F.A.C.]