# Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway, Suite 101
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Ryan E. Matthews
Interim Secretary

**PERMITTEE**

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

Authorized Representative:
Alberto Calleros, Plant Manager

Air Permit No. 0530021-064-AC
Permit Expires: 7/31/2018
Minor Air Construction Permit

CEMEX Brooksville South Cement Plant

Installation of loadout spout with dust collector system on EU No. 010

**PROJECT**

This is the final air construction permit, which authorizes the installation of a loadout spout with dust collector system on the Line 1 Clinker Storage Silos (Emissions Unit No. 010). The loadout spout will allow clinker to be transferred from the storage silos to trucks. The proposed work will be conducted at the CEMEX Brooksville South Cement Plant which consists of two Portland cement manufacturing lines and is a categorized under Standard Industrial Classification No. 3241. The existing facility is located 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 final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

**STATEMENT OF BASIS**

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

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

Executed in Hillsborough County, Florida

for

_____

Pamala Vazquez
Program Administrator
Permitting & Waste Cleanup Program
Southwest District

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air 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 Construction Materials Florida, LLC, alberto.calleros@cemex.com
Brent Steele, CEMEX Construction Materials Florida, LLC brentc.steele@cemex.com
Max Lee, Ph.D., P.E., Koogler and Associates, Inc., mlee@kooglerassociates.com
Javier Ramirez, FDEP Southwest District, Javier.Ramirez@dep.state.fl.us
Danielle Henry, FDEP Southwest District, Danielle.D.Henry@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.

Cathy Rodriguez April 7, 2017

(Clerk) (Date)

## FACILITY DESCRIPTION

The existing facility consists of two Portland cement manufacturing lines; associated raw and product material handling activities; coal handling activities and auxiliary equipment; as well as, all of the land designated as the South Brooksville facility and includes the following emissions units (EUs).

**Facility ID No. 0530021**

| **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<br>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 | No. 1 Clinker Silo Discharge Belt Dust Control @ Finish Mill No. 1 |

| **FW1. Brooksville South Portland Cement Plant 2 - *Regulated Emissions Units*** | | |
|---|---|---|
| **EU ID No.** | **Baghouse ID No.** | **FW2. 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<br>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 |
| 065 | 614.BV240 &<br>614.DC410 | Cement Storage Silo and Railcar Loadout System with Baghouses |
| **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

This project authorizes the installation of a loadout spout with dust collector system on the Line 1 Clinker Storage Silos (EU No. 010). The loadout spout specified in the application is a DCL UN 800EV loadout spout equipped with a cartridge filter dust collector that will control emissions of particulate matter (PM) from the spout. The loadout spout will allow clinker to be transferred from the storage silos to trucks. Potential PM emissions associated with this activity are expected to be 1.13 tons per year or less.

This project will modify the following emissions units.

| **Facility ID No. 0530021** | | |
|---|---|---|
| **ID No.** | **Facility's Internal ID No.** | **Emission Unit Description** |
| 010 | L-05, L-06, L-07 & (NEW Emission Point) | Clinker Storage Silos and Loadout with Baghouses |

## 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 (CAA).
- 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(PSD), F.A.C.

## PERMIT HISTORY/AFFECTED PERMITS

This permit modifies Construction Permit No. 0530021-043-AC (PSD-FL-091K).

## SECTION 2. ADMINISTRATIVE REQUIREMENTS (FINAL)

1. Permitting Authority: The permitting authority for this project is the Southwest District of the Department of Environmental Protection (Department). The mailing address, phone number and e-mail address is:

   Florida Department of Environmental Protection
   Southwest District Office
   Air and Solid Waste Permitting Program
   13051 North Telecom Parkway, Suite 101
   Temple Terrace, Florida 33637-0926
   Telephone: 813-470-5700
   E-mail: SWD_Air_Permitting@dep.state.fl.us

   All documents related to applications for permits shall be submitted to the above e-mail address and/or address.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Florida Department of Environmental Protection (Department), Southwest District Office's Compliance Assurance Program. The mailing address, phone number and e-mail address is:

   Florida Department of Environmental Protection
   Southwest District Office
   Compliance Assurance Program
   13051 North Telecom Parkway, Suite 101
   Temple Terrace, Florida 33637-0926
   Telephone: 813-470-5700
   E-mail: SWD_Air@dep.state.fl.us

3. Appendices: The following Appendices are attached as a part of this permit:
   - Appendix A (Citation Formats and Glossary of Common Terms);
   - Appendix B (General Conditions);
   - Appendix C (Common Conditions);
   - Appendix D (Common Testing Requirements);
   - Appendix E (NESHAP 40 CFR 63, Subpart A: General Provisions);
   - Appendix F (NESHAP 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry);
   - Appendix G (NSPS 40 CFR 60, Subpart A: General Provisions); and
   - Appendix H (NSPS 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants).

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

7. 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(4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Application for Title V Air Operation Permit: This permit authorizes modification of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V air operation permit is required for continued operation of the permitted emissions unit(s). 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 or commencing operation as modified. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Title V air operation permit, the applicant shall submit the following:
   a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;
   b. a copy of the initial compliance test report required by Specific Condition No. A.12., if not previously submitted; and
   c. the revised Operation and Maintenance Plan required by Specific Condition No. A.13.

   The application shall be submitted to the Permitting Authority.

   [Rules 62-4.030, 62-4.050 and Chapter 62-213, F.A.C.]

9. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's (DEP) Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are

subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

*{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}*

*{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed.* ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

## A. EU 010 - Clinker Storage Silos and Loadout with Baghouses

This section of the permit addresses the following emissions unit.

| EU No. | Facility's Internal ID No. | Emission Unit Description |
|---|---|---|
| 010 | L-06 to L-05, L-07 & (NEW Emissions Point) | Clinker Storage Silos and Loadout with Baghouses |

### FEDERAL REGULATIONS

A.1. Federal Regulatory Requirements: This emissions unit is subject to 40 CFR 63, Subpart LLL – National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry; applicable sections of 40 CFR 63, Subpart A - General Provisions; 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants; and applicable sections of 40 CFR 60, Subpart A - General Provisions. These subparts are adopted by reference in Rule 62-204.800, F.A.C.
[Rule 62-204.800(8) & (11), F.A.C.]

A.2. Loadout Spout with Dust Collector: The permittee is authorized to install a loadout spout with dust collector system (Model DCL UN 800EV) on the Line 1 Clinker Storage Silos (EU No. 010).
[Application No. 0530021-064-AC]

### PERFORMANCE RESTRICTIONS

A.3. Permitted Capacity: The maximum process/transfer/throughput rates and other critical operational parameters for these emission units are given below:

| EU ID No. | Description | Stack [1] | BH [2] | Temp [3] | Flow [4] | Throughput |
|---|---|---|---|---|---|---|
| 010 | Clinker Storage Silos- activity of clinker being transferred to the finish mill | 200/1.5 | medium | 200 | 2,600<br>2,038 | 83 TPH |
| | Clinker Loadout Spout – activity of clinker loadout, primarily for removal of off-spec clinker activity of clinker | 20/1 | low | 80 | 2,000<br>1,913 | |

1. Height (ft)/diameter(ft)
2. Baghouse temperature range.
3. Nominal temperature degrees Fahrenheit (ºF)
4. Nominal flow in actual cubic feet per minute (acfm) and standard cubic feet per minute (scfm).

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE); and, PSD-FL-091K (0530021-043-AC)]

*{Permitting Note: These emissions units are regulated under Rule 62-297.620(4), F.A.C., Exceptions and Approval of Alternate Procedures and Requirements; Rules 62-212.400 and 62-212.400(4), F.A.C., Prevention of Significant Deterioration (PSD-FL-091K) and Best Available Control Technology (BACT), respectively and, 40 CFR 63, Subpart LLL, National Emissions Standards for Hazardous Air Pollutants from Portland Cement Manufacturing Industry, adopted in Rule 62-204.800, F.A.C.}*

A.4. Restricted Operation: The hours of operation are not limited (8760 hours per year).
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

## EMISSIONS STANDARDS

A.5. Emissions Standards:

a. Visible Emissions (excluding EU-010 Loadout Spout with baghouse). Visible emissions shall not exceed 5 percent opacity, since each emissions unit's potential particulate matter emissions are less than 100 TPY and is equipped with a baghouse control system. As long as the visible emissions do not exceed 5 percent opacity, compliance is assumed for the particulate matter limitations established in Specific Condition A.5.c. If the Department has reason to believe that the particulate matter emissions standards in Specific Condition A.5.c. are not being met, it shall require that compliance be demonstrated by the test method specified in Specific Condition A.9.
[PSD-FL-091K (0530021-043-AC) and BACT]

b. Visible Emissions (for EU-010 Loadout Spout with baghouse): Visible emissions shall not equal or exceed 10% opacity.
[40 CFR 60.62(c), Subpart F]

*{Permitting Note: This activity is also subject to 40 CFR 63.1345, Subpart LLL; however, the VE standard for 40 CFR 60.62(c), Subpart F is more stringent.}*

c. Particulate Matter Emissions. The maximum allowable particulate matter emissions are:

| EU ID No. | Brief Description | Emission Limits | Basis |
|---|---|---|---|
| 010 | Clinker Storage Silos (L-05, L06 & L-07) | 0.015 gr/acf; 0.3 lb/hr; 1.31 TPY | BACT |
| 1. PSD-FL-091K replaces all previous PSD permits and represents latest BACT, NSPS and NESHAP emission limits. | | | |

[Application No. 0530021-064-AC, PSD-FL-091K (0530021-043-AC) and BACT]

## TESTING REQUIREMENTS

A.6. Initial Compliance Tests: The new Loadout Spout with baghouse (which is a part of EU ID No. 010) shall be tested to demonstrate initial compliance with the emissions standards for visible emissions standard. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit.
[Rule 62-297.310(8)(b)1, F.A.C.; 40 CFR 60.8, Subpart A]

A.7. Annual Compliance Tests: After the initial compliance test, during each calendar year (January 1st to December 31st), the emissions unit shall be tested to demonstrate compliance with the visible emissions standards.
[Rule 62-297.310(8)(a)1, F.A.C.]

A.8. Test Requirements: The permittee shall notify the Compliance Authority for ongoing annual testing in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310(9), F.A.C.]

A.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 |

| Method | Description of Method and Comments |
|---|---|
| 5 | Method for Determining Particulate Matter Emissions |
| 9 | Visual Determination of the Opacity of Emissions from Stationary Sources |
| 22 | Visual Determination of Fugitive Emissions |

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

## MONITORING REQUIREMENTS

A.10. Opacity Monitoring Requirements: Opacity monitoring shall be conducted in accordance with the provisions of 40 CFR 63.1350(f)(1)(i) through (vii) and (3) in accordance with your monitoring plan developed under 40 CFR 63.1350(p).
[40 CFR 63.1348(b)(3), 63.1350(f)(1)-(3), Subpart LLL and 40 CFR 60.64(b)(3), Subpart F]

## NOTIFICATION REQUIREMENTS

A.11. Notification of Operation Commencement: The permittee shall notify the Compliance Authority in writing of the date of commencing operation of the EU No. 10 after completing the modifications authorized by this permit, no later than fifteen (15) days after that date. Commencing operation means setting into operation of any emissions unit for any purpose.
[Rules 62-4.070, and 62-210.200, F.A.C., (definition of Commence Operation)]

## RECORDS AND REPORTS

A.12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310(10), F.A.C.]

A.13. Operation and Maintenance Plan: A revised operations and maintenance plan (which includes the modifications to emissions unit, EU No. 010) must be prepared and submitted for review and approval as part of the application for the revised Title V Operation Permit. The plan must include the information specified in 40 CFR 63.1347(a).
[40 CFR 63.1347, Subpart LLL]

*{Permitting Note: A revised Operation & Maintenance Plan with a revision date of 2/16/2017 was submitted with Application No. 0530021-064-AC}*