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November 20, 2009

Jon Holtom, P.E., CPM
Title V Program Administrator
Bureau of Air Regulation
Department of Environmental Protection
Bob Martinez Center
2600 Blirstone Road
Tallahassee, Florida 32399-2400

BUREAU OF AIR REGULATION

By email and overnight delivery

Subject: Florida Crushed Stone, d.b.a. CEMEX Construction Materials Florida, LLC
DEP File No. O530021-021-AV
Brooksville South Cement Plant Line 2
Revision of Title V Application
Response to Request for Additional Information dated October 13, 2009

Dear Mr. Holtom:

This letter is to reply to your Requests for Additional Information dated July 9, 2009 and October 13, 2009. Your information request items are reproduced below, preserving your numbering. Responses follow each item.

1. **Compliance Assurance Monitoring (CAM) Plan:** Please submit an applicability review for a CAM plan for the kiln/cooler/raw mill and the finish mill baghouse systems and for any other unit that will have uncontrolled emissions greater than 100 tons per year. It appears that both (kiln and finish mill) have uncontrolled emissions greater than 100 tons per year. Please refer to CAM applicability, 40 CFR 64, for each control device for Cement Line 2. This issued was discussed by phone with Mrs. Fawn Bergen and Mr. George Townsend on September 17, 2009.

Response: Please find attached an applicability review for each control device for Cement Line 2 and a CAM plan addressing those units subject to CAM applicability per 40 CFR 64.

2. **Compliance Plan (CP):** The Department acknowledges, as stated by CEMEX, that initial compliance testing has been completed under PSD-FL-351 (O530021-009-AC). Also, that if compliance testing is deemed necessary after the issuance of the modified Cement Line 2 air construction permit, CEMEX will submit the necessary compliance plan.

Response: No response required.

3. **Concurrent Processing of Title V Revision and Air Construction Permit Modification:** The Department acknowledges CEMEX's September 9, 2009 response which withdraws the request to do concurrent processing. The

construction permit expiration date will be extended to insure that the TIM construction will be completed within a reasonable time. Cement Line 2 will continue to operate under the new modified construction permit.

Response: No response required.

4. **Professional Engineer (P.E.) of Record:** It is our understanding that Mrs. Fawn W. Bergen, the CEMEX professional engineer of record for the AC permit modification application and subsequent response letters related to both AC and TV projects (including previous work of Mr. Lawrence Lucarelli, P.E. for the Title V revision application) would be leaving Koogler & Associates. Should any of the information contained in the Title V/AC application need to change as a result of your responses to our requests for additional information, that information will need to be recertified by a Professional Engineer. Please advise our office as to the identity of the new professional Engineer who will be assuming the certification responsibilities associated with the incomplete Title V permit revision/AC modification and provide replacement certification statements, as necessary.

Response: None of the information contained in the Title V/AC applications needs to change as a result of this response to your requests for additional information, so replacement certification statements are not necessary at this time.

We are hereby advising your office that Steven C. Cullen, P.E. will be the Professional Engineer who will be assuming the certification responsibilities associated with the incomplete Title V permit revision/AC modification.

If you have any questions, please do not hesitate to contact me at (352) 377-5822.

Sincerely,


SEAL

Steven C. Cullen, P.E.
Koogler & Associates, Inc.

Enclosure: CAM Document

Consultant to CEMEX Construction Materials Florida, LLC

Copy to: George Townsend, CEMEX (gtownsend@cemexusa.com) for distribution



Introduction

CEMEX Brooksville South Kiln No. 2 CAM Applicability Analysis and CAM Plan

This document describes fabric filters at the referenced facility and CAM implications. The pollutant is particulate matter (PM and PM10).

Fabric Filters

This section describes the fabric filters associated with Kiln #2.

	<u>EU ID</u>	<u>Activity Description</u>	<u>ID</u>
1.	044	Kiln/Cooler/Raw Mill	331.BF300
2.	045	Filter Dust Bin	331.BF640
3.	045	Filter Dust Bin Loadout Spout	311.LS609
4.	046	Raw Meal Transport	341.BF400
5.	047	Blend Silo Discharge	341.BF410
6.	047	Kiln Feed Bin	351.BF410
7.	047	Kiln Feed Transport	351.BF420
8.	048	Clinker Transport	471.BF110
9.	050	Clinker Silo Discharge 1	481.BF155
10.	050	Clinker Silo Discharge 2	481.BF165
11.	050	Clinker Storage Silo	471.BF120
12.	051	Finish Mill Collecting Bin	511.BF650
13.	052	Finish Mill	531.BF500
14.	054	Finish Mill Bucket Elevator	531.BF020
15.	057	Finish Mill Cement Transport	531.BF400
16.	057	Finish Mill Rejects Transport	531.BF290
17.	058	Cement Silo 5	612.BF005
18.	058	Cement Silo 5 Loading Bin	612.BF620
19.	058	Cement Silo 5 Loadout Spout N	622.LS140
20.	058	Cement Silo 5 Loadout Spout S	622.LS160
21.	059	Multi-Cell Cement Loadout	611.BF005
22.	059	Multi-Cell Cement Silo Alleviator	611.BF045
23.	059	Multi-Cell Loadout Transport	611.BF610
24.	059	Multi-Cell Loadout Spout	611.LS760
25.	060	Coal Mill	461.BF400
26.	061	Fine Coal Bin	461.BF560
27.	No ID	Packing Plant	641.BF150

CAM Exemption

	<u>EU ID</u>	<u>Activity Description</u>	<u>ID</u>
1.	044	Kiln/Cooler/Raw Mill	331.BF300

This emissions unit is exempted from CAM per 40CFR64.2(b)(vi) because a continuous compliance determination method (Continuous Opacity Monitor, COM) is required by NSPS and NESHAP.

CAM Not Applicable

This section describes the activities where CAM is not applicable, and provides justification.

	<u>EU ID</u>	<u>Activity Description</u>	<u>ID</u>
2.	045	Filter Dust Bin	331.BF640
3.	045	Filter Dust Bin Loadout Spout	311.LS609
12.	051	Finish Mill Collecting Bin	511.BF650
13.	052	Finish Mill	531.BF500
25.	060	Coal Mill	461.BF400
26.	061	Fine Coal Bin	461.BF560
27.	No ID	Packing Plant	641.BF150

Potential Pre-Control Device Emissions Less than Major Source

Certain activities have potential pre-control device emissions of the applicable regulated air pollutant (PM and PM10) that are less than 100 percent of the amount, in tons per year, required for a source to be classified as a major source (100 TPY); in accordance with 40CFR64.2(a)(3). This section provides brief justification.

<u>2.</u>	<u>045</u>	<u>Filter Dust Bin</u>	<u>331.BF640</u>
<u>3.</u>	<u>045</u>	<u>Filter Dust Bin Loadout Spout</u>	<u>311.LS609</u>

These activities have a pre-control device potential to emit under 100 TPY based on their physical and operational design. The design rate for these activities is 30 tons per hour. The uncontrolled emission factors are from webFIRE and its predecessor AFSEF, for SCC 30500612: Cement Manufacturing – Raw Material Transfer.

$$\text{PM, TPY} = (30 \text{ TPH} \times 8760 \text{ hours/year} \times 0.3 \text{ lb/ton}) / 2000 = 39 \text{ TPY}$$

$$\text{PM}_{10}, \text{TPY} = (30 \text{ TPH} \times 8760 \text{ hours/year} \times 0.15 \text{ lb/ton}) / 2000 = 20 \text{ TPY}$$

<u>12.</u>	<u>051</u>	<u>Finish Mill Collecting Bin</u>	<u>511.BF650</u>
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This activity has a pre-control device potential to emit under 100 TPY based on an operational limitation on the capacity of a source to emit an air pollutant, as an enforceable restrictions on the amount of material processed. This activity processes the materials other than clinker that go into finished cement. The PSD permit limits cement

production to 1,301,138 TPY and clinker production to 1,022,000 TPY. The difference (279,138 TPY) constitutes an effective and enforceable restriction on the amount of material processed by this emissions unit. The uncontrolled emission factors are from webFIRE and its predecessor AFSEF, for SCC 30500612: Cement Manufacturing – Raw Material Transfer.

$$\text{PM, TPY} = (279,138 \text{ TPY} \times 0.3 \text{ lb/ton})/2000 = 42 \text{ TPY}$$

$$\text{PM}_{10}, \text{TPY} = (279,138 \text{ TPY} \times 0.15 \text{ lb/ton})/2000 = 21 \text{ TPY}$$

26. 061 Fine Coal Bin 461.BF560

This activity has a pre-control device potential to emit under 100 TPY based on its physical and operational design. The design rate for this activity is 25 tons per hour. The uncontrolled emission factors are from webFIRE's predecessor AFSEF, for SCC 30501010: Mineral Products – Coal Crushing.

$$\text{PM, TPY} = (25 \text{ TPH} \times 8760 \text{ hours/year} \times 0.02 \text{ lb/ton})/2000 = 2 \text{ TPY}$$

$$\text{PM}_{10}, \text{TPY} = (25 \text{ TPH} \times 8760 \text{ hours/year} \times 0.01 \text{ lb/ton})/2000 = 1 \text{ TPY}$$

27. No ID Packing Plant 641.BF150

This activity has a pre-control device potential to emit under 100 TPY based on its physical and operational design. The design rate for this activity is 17 tons per hour. The uncontrolled emission factors are from webFIRE and its predecessor AFSEF, for SCC 30500619: Cement Manufacturing – Cement Load Out.

$$\text{PM, TPY} = (17 \text{ TPH} \times 8760 \text{ hours/year} \times 0.24 \text{ lb/ton})/2000 = 18 \text{ TPY}$$

$$\text{PM}_{10}, \text{TPY} = (17 \text{ TPH} \times 8760 \text{ hours/year} \times 0.2 \text{ lb/ton})/2000 = 15 \text{ TPY}$$

Inherent Process Equipment

Certain activities are considered inherent process equipment, and are not subject to CAM. This inherent process equipment is material recovery equipment that the owner has installed and operated primarily for purposes other than compliance with air pollution regulations. The equipment is operated at an efficiency during normal process operations that is higher than is necessary in order to comply with the applicable emission limitation. For the purposes of this document, inherent process equipment is not considered a control device.

Both these activities are mills (finish mill and coal mill) that use fabric filters primarily for product capture after milling. The finish mill produces powdered cement, and the coal mill provides pulverized coal. All mill product is captured by the fabric filters.

13. 052 Finish Mill 531.BF500

25. 060 Coal Mill 461.BF400

Compliance Assurance Monitoring Plan: Fabric Filters for PM Control

I. Background

A. Emissions Units

	<u>EU</u>	<u>Description</u>	<u>Identification</u>
4.	046	Raw Meal Transport	341.BF400
5.	047	Blend Silo Discharge	341.BF410
6.	047	Kiln Feed Bin	351.BF410
7.	047	Kiln Feed Transport	351.BF420
8.	048	Clinker Transport	471.BF110
9.	050	Clinker Silo Discharge 1	481.BF155
10.	050	Clinker Silo Discharge 2	481.BF165
11.	050	Clinker Storage Silo	471.BF120
14.	054	Finish Mill Bucket Elevator	531.BF020
15.	057	Finish Mill Cement Transport	531.BF400
16.	057	Finish Mill Rejects Transport	531.BF290
17.	058	Cement Silo 5	612.BF005
18.	058	Cement Silo 5 Loading Bin	612.BF620
19.	058	Cement Silo 5 Loadout Spout N	622.LS140
20.	058	Cement Silo 5 Loadout Spout S	622.LS160
21.	059	Multi-Cell Cement Loadout	611.BF005
22.	059	Multi-Cell Cement Silo Alleviator	611.BF045
23.	059	Multi-Cell Loadout Transport	611.BF610
24.	059	Multi-Cell Loadout Spout	611.LS760

B. Applicable Regulation, Emission Limit, and Monitoring Requirements

Regulation No.: 62-212, F.A.C. (BACT) and 62-296, F.A.C.

Emission limits:

Particulate matter (PM): 0.01 gr/dscf, 3 hr avg.

Particulate matter (PM10): 0.007 gr/dscf, 3 hr avg.

Visible emissions: 5% opacity (no visible emissions)

Monitoring requirements: Visible emissions tests, annual monitoring (M9)

C. Control Technology

Pulse-jet baghouses operated under negative pressure.

II. Monitoring Approach

The key elements of the monitoring approach are presented below:

A. Indicator

Baghouse pressure drop will be used as an indicator.

B. Measurement Approach

Pressure drop across the baghouse will be monitored daily.

C. Indicator Range

The indicator range is between 2" and 8" w.g.

D. QIP Threshold

The QIP threshold is nine (9) excursions in a six month reporting period.

E. Performance Criteria

Data Representativeness: Measurements are being made at the control devices.

Verification of Operational Status: Daily recording will note operational status.

QA / QC Practices and Criteria: The recorded data will be reviewed by the Environmental Manager.

Monitoring Frequency and Data Collection Procedure: Each baghouse pressure drop will be recorded daily from the magnahelic or photohelic gauge.

III. Justification

A. Background

This facility manufactures Portland cement. The pollutant-specific emission units are material handling processes, controlled by fabric filters (baghouses).

B. Rationale for Selection of Performance Indicator

Pressure drop was selected as the performance indicator because it is indicative of operation of the baghouse in a manner necessary to comply with the particulate matter and visible emissions standards. When the baghouse is operating properly, there will not be any visible emissions from the exhaust.

Any increase or decrease in pressure drop, outside of the stated range, indicates reduced performance of a particulate control device, therefore, the observed pressure drop is used as a performance indicator.

C. Rationale for Selection of Indicator Level

Operation of the baghouses with pressure drops within the selected indicator range will generally result in no visible emissions. When an excursion occurs, corrective action will be initiated, beginning with an evaluation of the occurrence to determine the action required to correct the situation. All excursions will be documented and reported.

The indicator range was provided by the equipment manufacturer (*FLS Instruction 70001855, page 20*).

An indicator range using pressure drop was selected because:

- (1) an increase or decrease in pressure drop outside the selected range can result in visible emissions, indicative of an increase in particulate emissions; and
- (2) a monitoring technique which does not require a Method 9 certified observer is desired.

The selected QIP threshold for baghouse visible emissions is nine (9) excursions in a 6-month reporting period. This level is 5 percent of the total pressure drop observations. If the QIP threshold is exceeded in a semiannual reporting period, a QIP will be developed and implemented.