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BUREAU OF AIR REGULATION

Mr. A.A. Linero, PE  
Program Administrator, Special Projects Section  
Bureau of Air Regulation  
Florida Department of Environmental Protection  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**RE: *Request for Additional Information Dated 7-15-09—Response  
DEP File Nos. 0530021-021-AV; Revision of Title V Permit  
Kiln 2 System  
CEMEX Construction Materials Florida, LLC; Brooksville South Cement Plant***

Dear Al:

CEMEX Construction Materials Florida, LLC (CEMEX) is in receipt of the Department's request for additional information (RAI) letter dated July 15, 2009 regarding the Title V Permit revision to incorporate the new Kiln 2 system (Projects 0530021-017-AC, -018-AC, and -020-AC) into the facility's Title V Permit No. 0530021-011-AV, at their Brooksville South Cement Plant. The comments below are addressed in the order as they appear in the letter.

**Compliance Assurance Monitoring (CAM) Plan**

**Please submit an applicability review 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 Line 2.**

**Response:** A CAM applicability analysis was performed and is included in Attachment A, Table 1. As shown, CAM applies for Kiln No. 2 (EU 044) for NOx. A CAM plan for this emissions unit is included in Attachment A. As shown in Table 1, most of the baghouses controlling PM/PM<sub>10</sub> emissions from the new Kiln line are not subject to CAM because they are subject to a post-1990 NESHAP (40 CFR 63 Subpart LLL), which contains requirements for compliance assurance. The Coal Mill and Fine Coal Bin (EU 060 and 061, respectively) use baghouses for

product recovery. The primary purpose of these baghouses is to recover coal and coal dust, which is re-circulated back into the process. These two baghouses would still be in operation even if emission control requirements were not in place. Therefore, they are not considered emission control equipment per 40 CFR 64 and CAM does not apply for these emission units.

**Compliance Plan (CP)**

**A CP needs to be submitted for every unit that has not been tested. If additional testing would be required by the “as-built” configuration for emissions unit (EU) 052 and the finish mill process heater in the new modified permit, then a CP is needed for these units.**

**Response:** At this time, there is no emission testing requirement (by permit or rule) that has not been completed for the new Kiln line (initial compliance testing required under Permit No. 0530021-009-AC/PSD-FL-351). Therefore, at this time a compliance plan is not necessary. If compliance testing is deemed necessary after issuance of the modified Kiln 2 system air construction permit, CEMEX will submit the necessary compliance plan.

**Concurrent Processing of Title V Revision and Air Construction Permit Modification**

**The Title V permit application indicates a request to do concurrent processing. The Department believes that the concurrent processing of these two permitting actions is not practical at this time due to the nature of the three modifications of the construction permit requested along with installation of the tire injection mechanism (TIM). Therefore, the Departments asks CEMEX to withdraw the request for the concurrent processing of the Title V and the Construction Permit.**

**Response:** CEMEX hereby withdraws the request for concurrent processing of the construction permit modifications and the Title V permit revision.

**After the construction permit has been issued, the Department will continue with the incorporation of Cement Line 2 and the Title V permit. The construction permit expiration 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.**

**Also, it is our understanding that Mr. Lucarelli, the Professional Engineer of record who sealed the Title V revision application, is no longer with CEMEX. Should any of the information contained in the Title V application need to change as a result of your**



responses to our July 13 request for additional information regarding the “as-built” construction permit revision, that information will need to be recertified by a Professional Engineer. Please advise our office as to the identity of the professional engineer who will be assuming the certification responsibilities associated with incomplete Title V permit revision application and provide replacement certification statements, as necessary.

**Response:** Fawn Bergen will be the Professional Engineer (PE) for all future submittals of the referenced project. As necessary, all documents will be signed and sealed by the PE including revisions to previously submitted documents/calculations/applications.

If you have any questions regarding this letter, please feel free to contact me at (352) 377-5822 or [FBergen@kooglerassociates.com](mailto:FBergen@kooglerassociates.com), or Mr. George Townsend, Environmental Manager for CEMEX Brooksville South, at (352) 799-7881 or [gtownsend@cemexusa.com](mailto:gtownsend@cemexusa.com).

Regards,

KOOGLER AND ASSOCIATES, INC.

*Fawn W. Bergen*  
9/11/09  
Fawn W. Bergen, PE  
Florida PE #61614

Enclosure: Attachment A – CAM Applicability & CAM Plan

copy to: J. Daniel, CEMEX (via email)  
L. DePrimo, CEMEX (via email)  
G. Townsend, CEMEX (via email)



**CAM APPLICABILITY ANALYSIS**  
**CAM PLAN – KILN NO. 2: NO<sub>x</sub>**

Table 1. CAM Applicability Analysis, Kiln 2 System, CEMEX Construction Materials Florida, LLC; Brooksville South Cement Plant

EU ID	EU Description	Control Equipment	Emission Limits	Potential Uncontrolled Emissions			CAM Applies? (Yes/No)	Comments
				PM/PM <sub>10</sub>	SO <sub>2</sub> (TPY) <sup>a</sup>	NO <sub>x</sub>		
044	Kiln 2/Preheater/ Precalciner/Clinker Cooler	Baghouse, SNCR	PM, PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> , CO, VOC, Hg	--	--	>100	NO <sub>x</sub>	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> . No control device for CO, SO <sub>2</sub> , VOC, and mercury.
045	Filter Dust Bin	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
046	Raw Meal Transport	Baghouse	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
047	Kiln Feed Transport	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
050	Clinker Storage	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
051	Finish Mill Collecting Bin	Baghouse	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
052	Finish Mill	Baghouse	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
054	Finish Mill Bucket Elevator	Baghouse	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
057	Cement Transport	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
058	Cement Silo 5 Loadout	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
059	Multi-Cell Cement Loadout	Baghouses	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .
060	Coal Mill	Baghouse (Inherent Process Equipment)	PM, PM <sub>10</sub>	--	--	--	No	Baghouses are inherent process equipment, where primary purpose is product (coal) recovery. Therefore, CAM does not apply.
061	Fine Coal Bin	Baghouse (Inherent Process Equipment)	PM, PM <sub>10</sub>	--	--	--	No	Baghouses are inherent process equipment, where primary purpose is product (coal) recovery. Therefore, CAM does not apply.
No ID	Packing Plant	Baghouse	PM, PM <sub>10</sub>	--	--	--	No	Subject to 40 CFR 63 Subpart LLL for PM/PM <sub>10</sub> .

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**Attachment CAM Plan  
Compliance Assurance Monitoring Plan for NO<sub>x</sub>  
Cement Kiln No. 2**

**I. Background**

**a. Emissions Unit**

**Description:** Kiln No. 2, Preheater, Precalciner, and  
Clinker Cooler

**EU Identification:** EU 044

**Facility:** CEMEX Construction Materials Florida,  
LLC; Brooksville South Cement Plant

**b. Applicable Regulations, Emission Limits, and Monitoring  
Requirements**

**Permit No.:** 0530021-009-AC/PSD-FL-351

**Regulated Pollutant:** NO<sub>x</sub>

**Emission Limit:** 1.95 lb/ton clinker, 243.75 lb/hr (30-day  
rolling average)

**Monitoring:** Currently required to continuously monitor  
emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, and THC, and  
monitor opacity.

**c. Control Technology**

Kiln No. 2 currently utilizes a baghouse to control PM/PM<sub>10</sub> emissions  
and SNCR to control NO<sub>x</sub> emissions.

**II. Monitoring Approach**

	<b>Indicator No. 1</b>
<b>I. Indicator</b>	Outlet NO <sub>x</sub> emissions.
<b>Measurement Approach</b>	The NO <sub>x</sub> emissions are measured with a CEMS meeting Rule 62-297.500, F.A.C. (Continuous Emissions Monitoring), 40 60.45 (NSPS Emissions Monitoring), and 40 CFR 60.13 (NSPS General Provisions Monitoring Requirements).
<b>II. Indicator Range</b>	An excursion is defined as a 30-day average greater than <b>1.95 lb/ton clinker</b> . Excursions trigger an inspection, corrective action, and a reporting requirement.
<b>III. Performance Criteria</b>	The system meets the requirements of Rule 62-297.500, F.A.C. (Continuous Emissions Monitoring), 40 60.45 (NSPS Emissions Monitoring), and 40 CFR 60.13 (NSPS General Provisions Monitoring Requirements).
<b>A. Data Representativeness</b>	
<b>B. Verification of Operational Status</b>	N/A
<b>C. QA/QC Practices</b>	Facility performs daily calibration verification, quarterly CGA audits, and annual RATAs.
<b>D. Monitoring Frequency</b>	NO <sub>x</sub> emissions are monitored continuously.
<b>Data Collection Procedures</b>	Readings are recorded at least once every 15 minutes by the DAS (electronic record).
<b>Averaging Period</b>	Hourly averages are computed the individual 15-minutes readings.

**III. Justification**

**a. Background**

This emissions unit is the Cement Kiln No. 2. Control equipment includes an SNCR system to control NO<sub>x</sub> emissions. A continuous emissions monitoring system (CEMS) is used to measure NO<sub>x</sub> emissions out of the stack. The CEMS is currently used for compliance with the permitted emission limits. CEMEX is proposing to use the NO<sub>x</sub> CEMS as an indication that the SNCR system is functioning properly.

**b. Rationale for Selection of Performance Indicators**

A significant increase in NO<sub>x</sub> emissions is an indicator that the SNCR is not properly operating.

**c. Rationale for Selection of Indicator Ranges**

The selected indicator range for the hourly rolling average NO<sub>x</sub> emissions is less than 1.95 lb/ton clinker. This excursion level is equivalent to the numerical NO<sub>x</sub> emissions limit, however the averaging period is more stringent (Permit No. 0530021-009-AC limits NO<sub>x</sub> emissions to 1.95 lb/ton clinker as a 30-day average).

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.

Historical CEM data is available upon request.