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ENVIRONMENTAL SERVICES

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KA 521-06-07

June 26, 2006

Confirmation of email dated May 26, 2006

RECEIVED

JUN 27 2006

BUREAU OF AIR REGULATION

David Zell
FDEP SW District Office
13051 N. Telecom Pkwy
Temple Terrace, Fl 33637

**Re: Cemex Brooksville Cement Plant
FDEP Project 1050010-019-AC
Cooling Air Dampers for Kiln No. 1
Response to Second RAI**

Dear David,

Following is a response to your second RAI related to the above captioned project. The responses follow numeric designation used in your RAI.

1. Damper Operation – Position Indicators for Dampers 323N and 323E and Record Keeping.

The 323N Damper has a variable position readout and the output is recorded on the PLC in the Control Room.

The 323 E Damper also has Control Room position readout. As this damper is an open or closed damper, the damper positioner reads zero percent for the closed position, when the raw mill is operating and the positioner reads 100 percent for open position when the raw mill is down.

The data from both position indicators are recorded on the PLC and archived.

2. Use of Other Dampers in the Kiln No. 1 System

Explain the function and use of the other dampers shown on the No. 1 Kiln Preheater Flow Chart (ID Nos. 317, 317a, 318, 319, 320, 321, 322, 323, 323a) and whether the position of any of these dampers would be changed during raw mill down operation.

317 This damper regulates the quantity of lift air required by the mill during operation. The damper position is variable during mill on conditions. This damper is closed when the mill is down

317A This is a manual damper and it's position is never changed.

- 318 This is the raw mill fan inlet damper. It is open during mill operation and closed shortly after the raw mill is shut down and the main mill fan has cooled down enough to shut down without suffering thermal heat damage.
- 319 This damper regulates the quantity of hot gases that are required to dry the material in the mill. This damper is slightly open during mill operating conditions. This damper is open when the raw mill is down
- 320 This damper is fully open when the raw mill is operating. It is fully closed when the mill is down. The damper isolates hot gases from entering the mill.
- 321 Open when the mill is operating and closed when the mill is down. The damper controls airflow from the raw mill fan discharge.
- 322 Regulates raw mill fan temperature and protects the fan from thermal damage. Opens whenever fan temp reaches 250 deg F. Its position in mill down conditions does not matter because other dampers isolate the system. (321 and 317)
- 323 Closed not used, disabled
- 323A Closed not used, disabled

As Cemex consider the operation of the 323 E and 323 N dampers as the temperature control dampers for D/F, these are the only dampers with recording positioners.

What was the position of these dampers during the June 16, 2005 D/F compliance test?

Dampers 317, 318, 320, 321, 323, 323A were all closed during the June 16, 2005 compliance test.

Damper 319 was open during the test.

Dampers 317A no change.

Damper 322 - its position in mill down conditions does not matter because other dampers isolate it from the raw mill bypass duct.

David Zell
June 26, 2006

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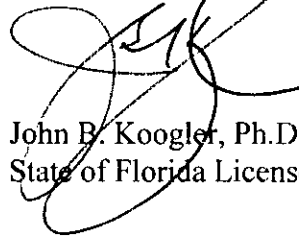
3. Particulate Matter Emissions

The use of Dampers 323N and 323E to control the temperature of kiln gases bypassing the raw mill in the Kiln No.1 system is not expected to measurably change the raw mill down gas flow rate as measured in the kiln stack. The purpose of these dampers is not to add additional cooling air to the system, the purpose is to add cooling air in a manner that will cool the bypassed gases quickly and uniformly. The placement of the dampers was based on Computational Fluid Dynamic (CFD) modeling and the effectiveness of the dampers has been demonstrated by subsequent D/F performance testing.

I trust this will satisfactorily respond to your RAI. If there are further questions or if clarification is required on any of the information provided herein, please contact me at 352-377-5822 or at jkoogler@kooglerassociates.com . A signed and sealed hard copy of this correspondence will follow.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

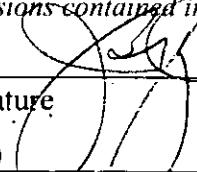


John B. Koogler, Ph.D., P.E.
State of Florida License No. 12925

JBK/lt



Professional Engineer Certification

1. Professional Engineer Name: John B. Koogler Ph.D., P.E. Registration Number: 12925
2. Professional Engineer Mailing Address... Organization/Firm: Koogler & Associates, Inc Street Address: 4014 NW 13 th St City: Gainesville State: FL Zip Code: 32609
3. Professional Engineer Telephone Numbers... Telephone: (352)377- 5822 Fax: (352)377-7158
4. Professional Engineer Email Address: jkoogler@kooglerassociates.com
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 _____ Date <u>June 26, 2006</u> (seal) 

*Attach any exception to certification statement.



Memorandum

TO: Cindy Mulkey
FROM: Lori
DATE: June 26, 2006
SUBJECT: Cemex Brooksville 1050010-019-AC

Dear Cindy,

Dr. Koogler wanted me to let you know that a hard copy is coming to you by UPS Ground Delivery tomorrow. He said the signed Responsible Official page will be sent under separate cover.

If you have any questions, please give us a call.

Thank you!
Lori