Board of County Commissioners

Hernando County

PLANNING DEPARTMENT

Government Center / Administration Building
20 North Main Street, Room 262
Brooksville, Florida 34601 - 2828

Planning - (352) 754-4057
Fax -(352) 754-4420
E-Mail: planning@co.hernando.fl.us

October 17, 2007

RECEIVED
OCT 26 2007
BUREAU OF AIR REGULATION

Al Linero, Administrator of New Source Review Section
FDEP, Division of Air Resource Management
Bureau of Air Regulations
2600 Blair Stone Rd, MS 5505
Tallahassee, FL 32399-2400

Re: CEMEX Cement, Inc., Kilns 1&2, Cooling Damper Installation and Operational Changes
DRAFT Permit #: 0530010-018-AC
Facility ID No.: 0530010

Dear Mr. Linero:

Hernando County Planning Staff have reviewed the Technical Evaluation associated with the pending Cemex Cement Air Construction Permit, and specifically the issue of thallium sampling . Per the Technical Evaluation, the Department does not propose to make the applicants requested change with regard to thallium sampling. The County supports DEPs position to potentially modify the applicants request with respect to thallium sampling, however, we would be more amenable to a modification if the applicant agreed to Hg sampling which is currently not required for this facility. The County would prefer a permit condition for continuous emissions stack monitoring system (CEMS), a sorbent trap, or at the very least, require Hg monitoring in the raw materials being processed (a mass balance approach that includes fuels).

Please review the County's position in this matter and let us know if any further action is needed by the County. We appreciate your review of this matter. If you should have any questions, please contact me at (352) 754-4057 ext. 28019.

Sincerely,

Dawn Velsor

Dawn Velsor
Lead Environmental Planner

DMV
e-mail: Ron Pianta, Planning Director
Larry Jennings, Deputy County Administrator

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KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20
November 15, 2007

Mr. Al Linero
Florida Department of Environmental Protection
Division of Air Resource Management
2600 Blair Stone Road MS 5500
Tallahassee, Florida 32399-2400

RE: Permitting Projects 0530010-018-AC and -019-AC; Outstanding Questions CEMEX Cement, Inc., Brooksville Facility

Dear Al:

This letter serves as a follow-up to several telephone conversations between you and Koogler and Associates, Inc. (Koogler) staff, regarding the thallium sampling requirements (Project 0530010-018-AC). CEMEX Cement, Inc. (CEMEX) is requesting removal of the daily kiln dust sampling and analysis for Kiln No. 1 and adding the following requirement for Kiln No. 1 (thallium and mercury sampling and analysis) and Kiln No. 2 (mercury sampling and analysis only):

Mercury and Thallium Compliance Demonstration: The permittee shall determine monthly and annual emission rates for mercury (Hg) and monthly concentrations of thallium (Tl) by using the following procedures:

Weekly samples shall be taken of raw material components and coal fed to Kiln Nos. 1 and 2. A monthly composite sample will be made from the weekly samples of raw material components and coal feed. Each monthly composite raw materials components sample shall be analyzed to determine Hg (Kilns 1 and 2) and Tl (Kiln 1 only) concentrations representative for the month and each monthly composite coal sample shall be analyzed to determine Hg concentrations representative for the month. The analytical methods used to determine Hg concentration shall be EPA or ASTM methods such as EPA Method 1631 or 7471A and to determine Tl concentration shall be by current in-house quality control (QC) laboratory x-ray analysis. If the concentrations are below the method detection limits or below the limits of quantification, the method detection limit will be assumed for the concentration of the raw material components or coal.

For mercury only: The monthly Hg input rate (lbs/month) shall be the product of the Hg concentration of the monthly samples and the respective mass of raw material components feed and coal introduced into the pyroprocessing system. The consecutive 12-month Hg throughput rate shall be the sum of the individual monthly records for the current month and the preceding eleven months (pounds of Hg per consecutive 12-months). Such records, including calculations and data, shall be completed no later than 30 days following each month.

Please note that this letter is to supercede a previous email from Fawn Bergen. Hopefully this modification satisfies the remaining issues regarding projects -018-AC, and the Department can

move forward with processing this combined construction permit. If you need any additional information or have any questions, please feel free to contact me or Fawn Bergen at (352) 377-5822 or Charles Walz, CEMEX Cement Inc., at (352) 799-2011, if you have any questions regarding this submittal.

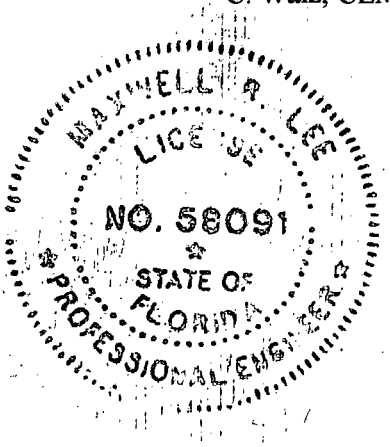
Very truly yours,

KOOGLER & ASSOCIATES, INC.

Max Lee, Ph.D., P.E.
Project Engineer
Florida PE #58091

ML

c: T. Heron, FDEP
J. Gill, CEMEX
C. Walz, CEMEX



Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Jeb Bush
Governor

Colleen M. Castille
Secretary

March 31, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael A. Gonzoles
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Re: DEP File 0530010-018-AC, PSD-FL-362
SNCR, Burners CEMEX Brooksville Plant

The Department received your permit application on October 14th and key meteorological and modeling information on October 18. The Department requested additional information on November 14. A response to this request was received on March 3, 2006 from Koogler & Associates for CEMEX.

The original application (0530010-018-AC) is to conduct various projects at the CEMEX Brooksville Plant including use of up to 100% petroleum coke (petcoke) as a fuel in Kilns 1 and 2; use of tire-derived fuel (TDF) in both kilns; installation of new kiln burners; installation of an ammonia injection system in the lower preheater of each kiln; and increase transfer/production rates for various emissions units. The Department has determined that the application is incomplete with respect to the requested projects.

The Department requests submittal of additional information in order to continue processing your application pursuant to Rule 62-4.055, F.A.C., Permit Processing, and the Standards of Issuing or Denying permits at Rule 62-4.070, F.A.C. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

The following information is required to complete the application:

1. In your response to our request for information you described work completed to convert the system from direct to semi-direct firing. However, CEMEX has indicated in an attachment to a subsequent application and during phone conversations with department staff that the system will be converted from semi-direct to indirect firing. Please describe any work that will be conducted with respect to this change, and any expected impacts this change will have on NO_X and CO. Also submit updates to the appropriate application pages for this change if actually planned. Is this conversion planned for both kilns?
2. The Department requested that you provide continuous emission monitoring system data for both kilns on an hour-by-hour basis including ammonia injection rates, process data, as well as the parameters needed to calculate CO and NO_X emissions in lb/ton of feed or lb/ton of clinker. The CEMS data provided included only CO and NO_X concentrations data, ammonia injection rate, and kiln feed rate. Please provide (in electronic format) the parameters needed to calculate CO

and NOx emission rates in lb/ton of feed or lb/ton of clinker for each hour as previously requested.

3. According to CEMEX's response to the Department's recent request for information, stack gas NO_X concentrations were established at compliance NO_X emission rates for various kiln feed rates. An ammonia injection rate necessary to stay below the predetermined stack gas NO_X compliance concentration is maintained by the operator. At what kiln feed rates were these NO_X concentrations established and what are the corresponding NO_X concentrations?

4. The Department has detected a discrepancy between section 2.1.2 Finish Mills Nos. 1 and 2 (page 4), and Table 3 (page 20) of the Report in Support of the Application for a PSD Construction Permit Review. Page 4 of the report indicates that CEMEX is requesting to split the PM limit for Finish Mills 1 and 2 to 78.9 TPY of PM for <u>each</u> finish mill. In Table 3, the Future Potential for Finish Mills 1 and 2 appear to be listed as 78.8 TPY for <u>both</u> mills. Please clarify and make the necessary adjustments. If Table 3 is incorrect, the *Total Net Change Due to Project* will need to be reassessed for PM.

5. We understand that the Kiln 1 existing tire delivery and injection system was modified. Please provide the historical maximum sustained tire feed rate achieved prior to modification and that achieved since the upgrade of the system.

6. How are the changes in the tire delivery and injection system expected to impact CO emissions given the absence of tertiary air and the bulky nature of the tires?

7. We consider it important to promptly calibrate the CO and NO_X CEMS to insure the data submitted in support of this application is accurate.

8. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to any such violations. This question was included in the Department's first request for additional information. According to Koogler's response dated March 1st, this information is to be provided in a separate document. To date, the Department has not received the requested information.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

Permit applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days. Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application.

If you have any questions regarding this matter, please call me at 850/921-9523.

Sincerely,

A. A. Linero, P.E.
Program Administrator
South Permitting Section

Cc: Charles Walz, CEMEX
Fawn Bergen, P.E., Koogler
Mara Nasca, DEP SWD

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Michael A. Gonzales
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X S. Davidson ☐ Agent ☐ Addressee

B. Received by (*Printed Name*) S. DAVIDS — C. Date of Delivery 4/7/06

D. Is delivery address different from item 1? ☒ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number
(*Transfer from service label*) 7000 1670 0013 3110 0758

PS Form 3811, February 2004 Domestic Return Receipt 102595-02-M-1540

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-05-11
March 1, 2006

Mr. A. A. Linero, PE
FDEP
Program Administrator, South Permitting Section
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: Request for Additional Information; DEP File 0530010-018-AC; PSD-FL-362 Projects at CEMEX Brooksville Plant

Dear Al:

CEMEX is in receipt of the Department's Request for Additional Information (RAI) dated November 15, 2005. On December 12, 2005 a separate application to address the burning of petcoke and tires on a trial basis was submitted to the Department. It is our understanding that the Department plans to handle this project in phases beginning with the trial burn and testing period. Although a separate RAI was sent out by the Department addressing the application for the trial burn and testing phase for petroleum coke and tires, all of the comments are addressed below in the order they appear in the referenced letter.

1. Please describe any work conducted or that will be conducted with respect to the burning of 100% petcoke. Describe the work items conducted that were excluded from Pillard's quotation submitted as Attachment 1. This includes work to convert the system from direct to semi -direct firing.

Response: In addition to the work associated with the Pillard burners and described in Attachment 1, of CEMEX's October 14, 2005 permit application, CEMEX installed a cyclone separator between the existing coal mills (one mill for each kiln) and the newly installed Pillard burners. The purpose of the cyclones is to provide a fuel-rich air stream that is directed into the central primary air and fuel channel of the Pillard burners and a second, fuel-lean air stream that is directed into the axial and swirl channels of the Pillard burners.

These cyclones, in addition to the burners, completed the conversion from the existing direct firing system to the presently installed semi-direct firing systems.

Regarding additional work to the coal mills to accommodate the burning of 100 percent petcoke, CEMEX is having the mills evaluated as will be discussed in more detail in response to FDEP Question No. 4. For the initial trial period, however, no further work is anticipated. For the trial period, CEMEX will use a petcoke with a Hardgrove index of 60-80. CEMEX has determined that the existing ball mills should be capable of grinding this coke to a consistency of 95 percent passing a 200 mesh sieve. This is the fineness that CEMEX's experience has determined necessary for the successful burning of 100 percent petcoke.

2. Describe how 100% petcoke can be used given the lack of volatile fraction to support combustion and flame.

Response: CEMEX has experience in burning 100 percent petcoke or a mixture of petcoke and TDF at their Balcones Plant in New Braunfels, Texas, burning petcoke at their Fairborn, Ohio Plant and burning petcoke at their Knoxville Plant. Additionally, TDF tests have been conducted at the Knoxville Plant. CEMEX has found that to burn 100 percent petcoke, it is necessary to grind the petcoke to a fineness of 95 percent passing a 200 mesh sieve. With this fineness, CEMEX has found that the petcoke will satisfactorily burn in the traditional burn-zone at the front of the kiln. For the trial period, CEMEX will use a petcoke with a Hardgrove index of 60-80 (a softer petcoke) so that the petcoke can be satisfactorily ground in the existing ball mills.

Regarding the co-firing of coal and petcoke, CEMEX has found that coal and petcoke mixes in the range of 90/10 and 80/20 can be satisfactorily burned and that 100 percent petcoke can be satisfactorily burned. CEMEX has found that when coal/petcoke mixes approaching 50/50 are burned, two flames develop in the kiln. One flame is the result of coal combustion and the second is the flame resulting from petcoke combustion. The coal flame develops near the front of the kiln while the petcoke flame develops further down the kiln. This double flame results in poor clinkering as well as operating problems.

Regarding the combustion of petcoke at the kiln inlet burner and Tire Derived Fuel fired at the feed shelf, CEMEX has had success with this combination. CEMEX has burned the petcoke/TDF mix at their Balcones Plant with good success.

3. Provide the procedures for receiving and storing petcoke as well as controlling dust from handling. Provide procedures related to groundwater protection.

Response: Petcoke will be stored in a section of the existing coal yard, where coal is currently stored in piles. If the petcoke is dusty, a diesel-powered portable water truck will be available to spray the pile. There are currently no groundwater protection measures taken for the coal piles in the coal yard. CEMEX plans to store petcoke in the same manner as coal.

4. Are the coal mills capable of grinding petcoke to the specifications needed and to supply a 100% petcoke fuel stream for the two kilns?

Response: The CEMEX Combustion Group and an outside consultant, F.L. Smidth, are presently evaluating the existing coal mills for grinding petcoke. Based on experience at the CEMEX Knoxville Plant, CEMEX has found that ball mills, similar to the mills presently in place at the Brooksville Cement Plant, are capable of grinding petcoke with a Hardgrove index in the range of 60-80. For grinding harder petcoke (with a Hardgrove index in the range of 35-40), CEMEX and FLS are looking into the feasibility of installing a pre-grinder ahead of the ball mills or completely replacing the existing ball mills with vertical roller mills. The Department will be provided with the results of this feasibility study when the study is completed.

For purposes of the trial period requested by CEMEX, petcoke with a Hardgrove index of 60-80 will be used so that the required degree of fineness (95 percent passing a 200 mesh sieve) can be achieved with the existing ball mills.

5. Petcoke contains more sulfur than coal contains. With the low alkali levels in the native limestone, how will CEMEX compensate with the greater alkali requirements inherent in burning petcoke? Will it be necessary for CEMEX to use even more of the 16% LOI fly ash and less bauxite or sand or clay?

Response: It is recognized that the sulfur-alkali balance is important both in the quality of the clinker and the operation of a cement plant. Conventional wisdom is that if the sulfur-

alkali balance exceeds unity, sulfur emissions (as sulfur dioxide) will increase and/or there will be sulfur deposits in the riser duct and/or preheater. It has been the experience of CEMEX, however, and the experience of European cement producers, that a sulfur-alkali ratio of up to two can be maintained without increasing SO_2 emissions or experiencing sulfur deposits.

Operating with a high sulfur-alkali ratio can be accomplished while burning 100 percent petcoke by assuring that there is complete burnout of the petcoke under oxidizing conditions early in the kiln. This allows the fuel sulfur to form sulfate complexes in the clinker and to exit the kiln with the clinker. To assure the early burnout of the petcoke requires grinding the petcoke to a fineness of 95 percent passing a 200 mesh sieve and requires sufficient oxygen to assure the burnout of the petcoke under oxidizing conditions. CEMEX has had experience operating under these conditions at their Fairborn, Ohio Plant, their Balcones Plant and their Knoxville Plant and is of the opinion that similar operations can be achieved at the Brooksville Cement Plant.

One other thing that CEMEX is doing to increase the alkalinity of the kiln feed is looking at additives such as pumice. The increased alkalinity both helps the sulfur-alkali balance and it provides alkalis necessary for the early setting strength of the cement produced.

6. Please provide information on the effects of additional vanadium and nickel found in petcoke upon the formation of sulfuric acid mist.

Response: Any additional amounts of vanadium and/or nickel in petcoke are not expected to have any measurable effect on sulfuric acid mist emissions from the CEMEX Brooksville Cement Plant. It is recognized that soot deposition resulting from the firing of petcoke in steam generators has resulted in boiler tube corrosion as a result of higher levels of vanadium and/or nickel in soot and the catalytic effect of these metals on sulfur dioxide in the gas stream. This same effect is not expected in a cement plant, however, because of the high overall dust concentration in the kiln system and the nature of this dust.

To evaluate the overall magnitude of potential increases in vanadium and nickel in the kiln system as a result of firing various fractions of petcoke, several references were reviewed. Geometric mean values of vanadium and nickel in kiln feed, coal and coke were determined from these references and are presented in the following table:

Material	Vanadium (ppm)	Nickel (ppm)
Kiln Feed	38	21
Coal	65	33
Petcoke	270	80

For purposes of this discussion, a kiln feed rate of 150 tons per hour and a fuel firing rate of 10 tons per hour were taken as typical. Based on these system operating conditions and the vanadium and nickel concentrations in the feed and fuels, data in the following table summarize the total vanadium and nickel input to the kiln system for various petcoke firing fractions:

Petcoke/ Coal Ratio	Material	Vanadium (lb/hr)	Nickel (lb/hr)
0/100	Feed	11.4	6.3
	Coal	1.3	0.7
	Petcoke	0.0	0.0
	Total	12.7	7.0
20/80	Feed	11.4	6.3
	Coal	1.0	0.5
	Petcoke	1.1	0.3
	Total	13.5	7.1
40/60	Feed	11.4	6.3
	Coal	0.8	0.4
	Petcoke	2.2	0.6
	Total	14.4	7.3
100/0	Feed	11.4	6.3
	Coal	0.0	0.0
	Petcoke	5.4	1.6
	Total	16.8	7.9

The data in this table demonstrate that when firing 100 percent coal, there is approximately 12.7 pounds per hour of vanadium input to the kiln system and approximately 7.0 pounds per hour of nickel. With 100 percent petcoke firing, the vanadium input to the kiln system will increase by approximately 4.1 pounds per hour and the nickel input will increase by

approximately 0.9 pounds per hour. These increases in vanadium and nickel will be associated with a kiln feed rate of 150 tons per hour and a corresponding kiln dust recirculation rate of approximately 15 tons per hour. In this total material feed/recirculating dust environment, the increase in vanadium and nickel is not expected to have any measurable effect on the formation of sulfuric acid mist.

7. Please describe any work conducted or that will be conducted with respect to burning TDF. This should include any modifications made or to be made to the existing tire burning system on Kiln 1 and the proposed system on Kiln 2. Describe the handling and feeding system.

Response: Tires are presently fired to Kiln No. 1 as authorized by Department Air and Solid Waste Permits. To fire tires to Kiln No. 2, a tire feeder, identical to the tire feeder on Kiln No. 1 will be installed on Kiln No. 2. This feeder will have a double air lock system to prevent air and leakage into the kiln and to prevent kiln exhaust gases from being discharged to the atmosphere during the tire feeding process. The Department has the specifications for the Kiln No. 1 tire feeder and, as stated, an identical feeder will be installed on Kiln No. 2.

The tire storage area, as presently permitted, will remain unchanged. The tire handling system between the tire storage area and the tire feeders on the two kilns has been automated and is presently being repermitted by the Department's Bureau of Waste Management, Southwest District Office.

For informational purposes for the Bureau of Air Regulation, the automated tire handling system is described in Attachment 1. This system includes a:

- trailer tipper,
- live bottom hopper,
- rotating disk tire separator,
- tire sorting conveyor system,
- inclined tire conveyor,
- crossbelt conveyor, and
- weigh scale.

From the scale, the tires are fed through a double gate tire feeder into the riser duct. As stated previously, a tire feeder exists on Kiln No. 1 and the automated tire handling system is in place for Kiln No. 1. The tire feeder will be installed on Kiln No. 2 for the trial period upon

Department approval. At that time, the automated tire feed system will be tied into the Kiln No. 2 tire feeder.

8. Given the lack of a tertiary air duct, how will CEMEX insure that sufficient air will be available in the area of the kiln riser to insure proper combustion of TDF and burn out of CO?

Response: As with the burning of TDF in Kiln No. 1, CEMEX will assure sufficient oxygen is available in the area of the kiln riser by increasing the draft on the kiln and hence, the oxygen level at the back end of the kiln. This is the procedure that CEMEX has used to assure efficient TDF combustion on Kiln No. 1 for years. Also see response to Question No. 9.

9. Describe the combustion zone within the riser and lower preheater including the residence time to insure maximum burnout of CO.

Response: To provide assurance that carbon monoxide emissions can be managed while burning TDF, the following review of emission data collected at the CEMEX Plant in 1993 is provided. These data were collected on Kiln No. 1 under baseline kiln firing conditions (100 percent coal) and while the kiln was firing a mix of coal and TDF. The comparative testing was required by FDEP to demonstrate the efficacy of using TDF as a fuel supplement and all data have been provided to the Department.

As demonstrated by the summary of data previously submitted to the Department, and as addressed in response to Department Question No. 8 above, CEMEX can adjust the oxygen level at the back end of the kiln (the entrance to the riser duct) to assure that there is sufficient oxygen to efficiently burn the TDF. As a point of reference, when the above referenced compliance tests were conducted in 1993, the oxygen level at the back end of the kiln while firing 100 percent coal ranged from approximately 1.0-1.5 percent. In comparison, when a mix of coal (79 percent) and TDF (21 percent) was burned, the oxygen level at the back of the kiln ranged from approximately 3.0-4.0 percent.

The carbon monoxide emission rates measured during the 1993 test periods showed 12-hour average carbon monoxide emission rates ranging from 0.22-0.29 pounds per ton of preheater feed with coal firing and 12-hour average CO emission rates ranging from 0.28-0.40 pounds per ton of preheater feed when a mix of coal (79 percent) and TDF (21 percent) was fired. Taking into consideration the fact that the testing was conducted over

a limited period of time and at a time when there was very little experience operating the kiln while firing TDF, the data demonstrate that CEMEX plants can be operated in a manner that will assure the burnout of carbon monoxide resulting from the combustion of coal and TDF in the pyroprocessing system.

10. Please describe CEMEX experience using the 16% LOI fly ash described on Page 50 with respect to CO emissions. Has CEMEX been able to use this fly ash and comply with the present CO limit of approximately 2 lb/ton clinker and the dioxin/furan limits of 0.2 ng/dscm (or 0.4 ng/dscm)?

Response: CEMEX has reviewed the LOI analyses of flyash for the period May 2005-February 2006. During this period, almost 1200 flyash samples were analyzed for LOI. The average LOI of all samples was 6.5 percent and the geometric mean LOI of all samples was 5.7 percent. The range of LOI for all samples was 1.5-18.5 percent and only approximately one percent of all samples exceeded an LOI of 16 percent. CEMEX does not plan to change suppliers of flyash and hence, the LOI of flyash used in the future will be expected to be in the range reported herein.

As the LOI of the flyash will not change from that historically used by CEMEX, the CO emissions are not expected to change appreciatively.

Regarding Dioxin/Furan emissions, extensive testing conducted by CEMEX has demonstrated that D/F formation is a function of gas stream cooling between the preheater and kiln baghouse; not a function of kiln feed.

11. How will burning TDF and petcoke affect the heat balance as well as conditions related to dioxin formation and control?

Response: The overall heat input to the pyroprocessing system will not change with the burning of petcoke and TDF. Under an aggressive TDF firing scenario (80 percent petcoke and 20 percent TDF), 80 percent of the heat input will be through the kiln burner with the remaining 20 percent supplied by TDF introduced at the riser duct and onto the kiln feed shelf. As discussed previously, the petcoke will be ground to a fineness of 95 percent passing a 200 mesh sieve to assure the burnout of the petcoke in the traditional kiln burning zone near the front end of the kiln. The heat input by TDF will be the same as it has been during the use of TDF in Kiln No. 1 at the CEMEX Brooksville Cement Plant for years. This heat will

be used for preheating and possibly precalcining the kiln feed as it passes through the preheater.

Regarding the formation of Dioxins and Furans, as previously stated, extensive testing conducted by CEMEX has demonstrated that D/F formation is not a function of kiln firing conditions or kiln feed chemistry. The formation of D/F is a function of gas stream cooling between the preheater and kiln baghouse.

12. Provide continuous emission monitoring system (CEMS) data from the recently installed systems for both kilns on an hour-by-hour basis. Include ammonia injection rates and process data as well as the parameters needed to calculate CO and NOx emissions in term of lb/ton of feed or lb/ton of clinker.

Response: Recent CEMS data for NOx and CO is included in Attachment 2 of this letter.

13. Please provide the certification documentation for the recently installed CEMS.

Response: The NOx and CO CEMS on Kiln No. 1 and Kiln No. 2 are not certified. The monitoring instruments were installed and calibrated so that they could be used to provide reasonable assurance of compliance with the NOx and CO emission limiting standards for the two kilns. Additionally, there is an automatic zero and span gas injection daily on each of the instruments and periodically CEMEX personnel conduct a Cylinder Gas Audit of the instruments. Again, the present purpose of the monitors is to provide reasonable assurance of compliance with the permitted emission limiting standards.

14. If the CEMS have not yet been calibrated, please detail how the amount of ammonia necessary to maintain compliance with the NOx is determined?

Response: The amount of ammonia injected through the SNCR system on Kiln No. 2 was established during compliance testing. It should be noted that ammonia injection is not necessary to assure compliance with the NOx emission limiting standard on Kiln No. 1.

On Kiln No. 1 and No. 2, stack gas NOx concentrations were established at compliance NOx emission rates for various kiln feed rates. During day-to-day operations of Kiln No. 2, the plant operators maintain an ammonia injection rate necessary to stay below the predetermined

stack gas NOx compliance concentration depending on kiln feed rate. The compliance NOx concentrations are also available for Kiln No. 1 and should it be necessary, ammonia can be injected to provide assurance on this kiln also.

15. Provide information from other CEMEX projects where petcoke or TDF have been used and summarize the resulting emission changes.

Response: CEMEX burns petcoke with and without TDF at their plants in Knoxville, Tennessee, Fairborn, Ohio and New Braunfels, Texas. The company has found that emission rates of sulfur dioxide, nitrogen oxides, and carbon monoxide are site specific; depending on kiln feed chemistry, plant design, and plant operating conditions. As the effects of petcoke and TDF on emissions are site specific, CEMEX has requested, at the Department's suggestion, a trial period to evaluate the effects of petcoke and TDF firing at the Brooksville Cement Plant.

In general, CEMEX has found that the burning of up to 100 percent petcoke has had very little effect on SO_2 and CO emissions, but it has been observed that NOx emissions have increased in the order of 35 percent. The SO_2 emissions are maintained in a compliance range by firing a finely ground petcoke to assure complete burnout near the front end of the kiln and the incorporation of the fuel sulfur as a sulfate in the clinker which exits the kiln. CO emissions are maintained in a compliance range by adjusting the oxygen level at the kiln exit and by managing the carbon content of the kiln feed.

16. Provide information showing what the effects of ammonia injection (SNCR) have been to-date on emissions of CO. It is possible to separate the effects of SNCR on CO from the effects of petcoke, TDF, and 16% LOI fly ash. This is needed to allow a thorough BACT analysis.

Response: A report on SNCR tests conducted at the CEMEX Balcones Plant in New Braunfels, Texas is provided as Attachment 3. These tests, while representative of very short periods of time, do show an increase in CO emissions when ammonia is injected for NOx control. This in all probability is the result of the competing reaction between CO and ammonia radicals for oxygen in the riser duct. It is expected that with operating experience the oxygen concentration at the kiln exit can be balanced to minimize the increase in CO emissions associated with ammonia injection.

Regarding the effects of petcoke, TDF and flyash on CO emissions, the petcoke and TDF firing experience at the CEMEX Fairborn, Ohio Plant, the Knoxville, Tennessee Plant, the Balcones Plant, as well as the TDF firing experience that CEMEX has had at the Brooksville Cement Plant all demonstrate that CO emissions can be controlled by adjusting the oxygen level at the kiln exit.

CO emissions associated with the carbon content of flyash and other kiln feed constituents are generated in the preheater and are not a function of the combustion process or processes in the pyroprocessing system. As such, CO emissions that are a function of kiln feed can be and will be managed by managing the carbon content of the kiln feed constituents.

17. Please provide a summary for the past two years of the required daily sampling and recording of baghouse dust thallium concentration described in Condition B.20 of the facility Title V Operation Permit.

Response: Thallium monitoring for the past two years has shown that the concentration of thallium in kiln dust has consistently been below the action level of 1.5 percent. The monthly average thallium concentration for the two year period has been 0.31 percent and the range of individual thallium concentrations has been 0.02-1.33 percent.

18. Does CEMEX waste baghouse dust in general or to meet the mentioned thallium requirements in particular?

Response: CEMEX has not wasted baghouse dust for the past four years for purposes of controlling the thallium concentration of the dust or for any other purpose.

19. Where is the dust stored or where is it disposed or sold?

Response: As stated previously, Cemex has not wasted baghouse dust for the past several years.

20. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to any such violations.

Response: CEMEX will respond to this comment under separate cover.

21. The coordinates in the application for Kiln 1 and Kiln 2 are 356250 m E, 3168370 m N and 356300 m E, 3168380 m N respectively. In the modeling for Kiln 1 and Kiln 2, 356007 m E. 3169248 m N and 356052 m E, 3169261 m N is used. Please verify which coordinates are correct. If the modeling coordinates are incorrect, please update the modeling.

Response: The coordinates for Kilns 1 and 2 stacks were refined from a site map for the modeling analysis. Therefore, the coordinates reflected in the modeling analysis reflect the correct location of the stacks. The coordinates in the application should reflect the modeled coordinates. The revised application pages are in Attachment 4.

22. Basically, we need better descriptions of the petcoke and TDF projects besides the very basic descriptions provided. Please submit test protocols for trial tests using petcoke and TDF. This information is needed to determine the effects and develop procedures to minimize emissions increases such as for CO and evaluate the effects on other pollutants such as dioxin and VOC.

Response: A test protocol for the petcoke and TDF projects will be prepared and submitted under separate cover. The protocol will set forth the coal/petcoke ratios to be evaluated as well as the fraction of the pyroprocessing heat input provided by TDF. Additionally, the protocol will set forth operating conditions that will be monitored/adjusted to assure compliance is maintained with all regulated emissions.

If you have any questions regarding these issues, please contact me at 352-377-5822 or FBergen@kooglerassociates.com, or Charles Walz at 352-799-2011 or charles.walz@cemexusa.com.

Very truly yours,

KOOGLER & ASSOCIATES

Fawn W. Bergen, P.E.
PE Seal # 61614
Project Engineer

FB
Enclosure: Attachments 1 - 4
cc: J. Gill, CEMEX
C. Walz, CEMEX

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

ATTACHMENT 1

•Whole tires arrive in closed trailers, which are parked in a designated area; (Tires are pre-sorted; trailers contain either passenger/light truck or truck tires, which are 'campaigned,' with periodic switches from one size to the other);

•Trailers are moved onto a trailer tipper (#1), as needed to maintain the feed rate;

•When the trailer tips and dumps, the tires drop into a live bottom hopper (#2);

•A walking floor moves the tires through the hopper;

•A rotating disk tire separator (#3) feeds individual tires onto a belt conveyor;

•On the conveyor sorting system (#4) tires are passed or rejected on size and condition (Rejects are dumped off the system into a collection bin);

•An inclined conveyor (#5) then delivers the tires to Level 3A of the preheat tower;

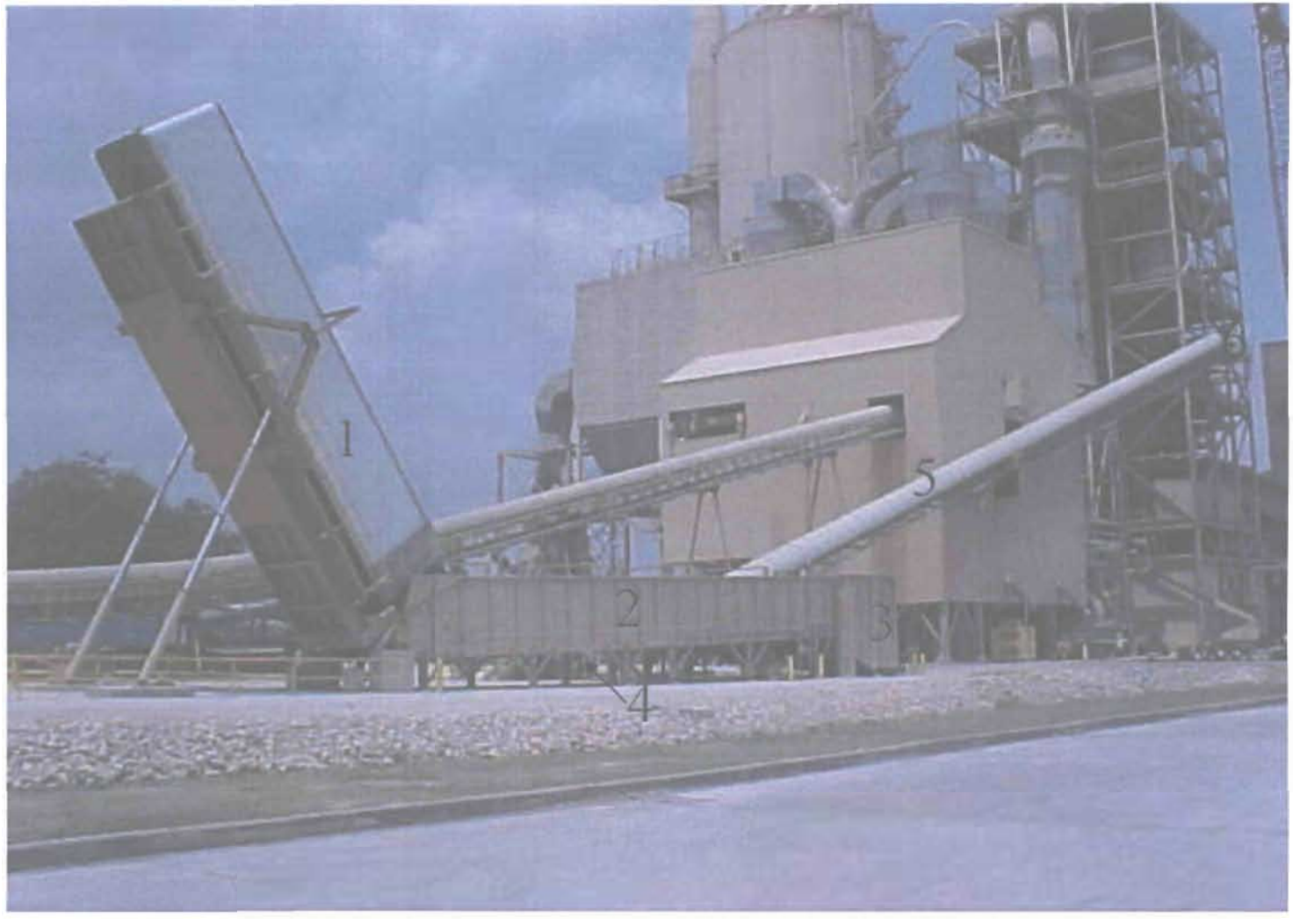
•A cross-belt on Level 3A (#6) moves the tires to the scale (#7) and double gate (#8);

•The scale spaces the release of tires into the gate for consistent feed rate by weight;

•The double gate limits ambient air infiltration as tires enter the preheat tower;

•The tires then drop approximately 15' from the gate onto the feed shelf; and

•They ignite and burn in the back end of the kiln at >2000° F.



1 – Trailer Tipper (with trailer)
2 – Live Bottom Hopper
3 – Rotating Disk Tire Separator
4 – Tire Sorting Conveyor System
5 – Inclined Tire Conveyor
6 – Cross Belt Conveyor

1 – Trailer Tipper
2 – Live Bottom Hopper
3 – Rotating Disk Tire Separator
4 – Tire Sorting Conveyor System
5 – Inclined Tire Conveyor

4 – Conveyor Sorting System
5 – Inclined Tire Conveyor

6 – Cross-Belt Conveyor
7 – Scale
8 – Double Gate

ATTACHMENT 2

Summary of Non-Certified CO and NOx CEM Data for Kiln No. 1 and No. 2
CEMEX Brooksville Cement Plant

Date/Time	Kiln 1					Kiln 2				
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)		CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)	
12/5/2005 10:00	0	56.8	0	87.9		0	88	0	88.5	
12/5/2005 11:00	193.4	84.9	0	83.8		638	214.6	0	90.6	
12/5/2005 12:00	560.8	94.8	0	75.9		310.4	172	0	97.6	
12/5/2005 13:00	879.4	92.6	0	77.7		139.9	315.6	0	102.5	
12/5/2005 14:00	1117.6	59.8	0	82		155.6	86.4	0	106.9	
12/5/2005 15:00	593	97.5	0	78.5		129.8	114.9	0	106.9	
12/5/2005 16:00	896.3	52.5	0	73.1		405.8	319.6	0	106.6	
12/5/2005 17:00	881.4	52.8	0	72.9		796.5	93.1	0	104.7	
12/5/2005 18:00	1233.5	55.3	0	81		324	275.4	0	114.9	
12/5/2005 19:00	1089	100.8	0	78.9		220.6	41.3	0	106.8	
12/5/2005 20:00	832.7	151	0	76.6		403.3	59.4	0	92.4	
12/5/2005 21:00	945.1	57.8	0	79.8		1034.2	76.4	0	103.7	
12/5/2005 22:00	557.6	48.8	0	80.1		120.9	28	0	102.6	
12/5/2005 23:00	1152.3	51.5	0	79.8		234.5	131.8	0	104.9	
12/6/2005 0:00	537.4	53.7	0	80		188.5	96.6	0	105	
12/6/2005 1:00	1004.8	64.6	0	82		1081.4	83.3	0	106.8	
12/6/2005 2:00	281.7	71	0	84.8		209	50.5	0	98.7	
12/6/2005 3:00	55.7	183.4	0	84.8		864.3	113.5	0	95.1	
12/6/2005 4:00	55.3	247.8	0	91.8		91.6	114.1	0	101.8	
12/6/2005 5:00	106.8	295.1	0	98.9		151.6	58	0	105	
12/6/2005 6:00	78.6	213.4	0	102.6		296.6	45.6	0	103.6	
12/6/2005 7:00	95.3	173	0	104.8		132.1	56.2	0	100.1	
12/6/2005 8:00	176.8	134	0	105		169.6	223.6	0	103.8	
12/6/2005 9:00	190.5	79.3	0	106.1		357.3	140.9	0	105	
12/6/2005 10:00	269.1	55.5	0	107		624.9	114.2	0	105.1	
12/6/2005 11:00	903.3	38.2	0	108.7		470.9	108.3	0	104.9	
12/6/2005 12:00	1075.7	32.5	0	88.6		573.5	104.2	0	102.4	
12/6/2005 13:00	1118.4	46.9	0	75.6		320	122.8	0	100.1	
12/6/2005 14:00	43.4	83.5	0	82.2		240.2	184.3	0	101.6	
12/6/2005 15:00	125.8	89.8	0	94.4		272.7	175.6	0	105.9	
12/6/2005 16:00	259.4	109.2	0	95.3		232.1	119.9	0	106.9	
12/6/2005 17:00	256.1	164.9	0	103.3		217.8	120.2	0	108.7	
12/6/2005 18:00	243.7	136.6	0	105.8		244	101.8	0	109.9	
12/6/2005 19:00	300.2	139.3	0	110.3		380	98.1	0	116.6	
12/6/2005 20:00	493.8	201	0	111.9		852.8	65.8	0	112.7	
12/6/2005 21:00	452.3	241.5	0	109.4		466.5	31.6	0	109.9	
12/6/2005 22:00	782.9	51.9	0	94.3		451.5	53.5	0	110	
12/6/2005 23:00	46.5	36.5	0	2.8		391.6	26.9	0	110	
12/7/2005 0:00	260.2	31.2	0	20.4		563.4	28.8	0	107.6	
12/7/2005 1:00	273.3	86.9	0	58		215.7	11.9	0	100	
12/7/2005 2:00	54.9	176.3	0	86		171.4	33.9	0	105	
12/7/2005 3:00	75.8	171.3	0	97.4		207.2	23.1	0	113.5	
12/7/2005 4:00	214.4	194	0	104.6		623.6	30.1	0	96.8	
12/7/2005 5:00	71.6	200.6	0	106.5		85.7	106.5	0	103.5	
12/7/2005 6:00	103	194.5	0	109.9		498.1	56.6	0	108.6	
12/7/2005 7:00	258.1	171.3	0	114.4		96.4	39.5	0	105	
12/7/2005 8:00	680.8	60.5	0	110.1		129.6	113.5	0	105	
12/7/2005 9:00	155.7	196.4	0	113.8		246.4	145.2	0	104.9	
12/7/2005 10:00	277.7	127.2	0	114.8		636.5	69.6	0	105.1	
12/7/2005 11:00	252	123.5	0	115.5		435.9	83.2	0	106.5	
12/7/2005 12:00	258.6	125.5	0	114.6		471.6	60.4	0	107.1	
12/7/2005 13:00	236.3	173.9	0	110.1		513.4	50.7	0	106.9	
12/7/2005 14:00	218.5	243.3	0	110.7		403	44.8	0	106.9	
12/7/2005 15:00	282.4	194.9	0	111.8		268	23.6	0	101.1	
12/7/2005 16:00	210.6	287.4	0	112.4		84.3	53.2	0	97.7	
12/7/2005 17:00	225.1	232.6	0	114.2		243.4	30	0	98.7	Start
12/7/2005 18:00	206.3	225.8	0	110.3	Start	110.2	63.3	1	95	Ammonia
12/7/2005 19:00	86.3	242.1	2	112.2	Ammonia	138.9	119	1	96.6	
12/7/2005 20:00	95.5	279	2	115.7		191.6	112.7	1	105	
12/7/2005 21:00	145.7	258.2	2	118		180.8	49.8	1	103.8	
12/7/2005 22:00	92.4	303.4	2	118.9		83.1	43.1	1	95.1	
12/7/2005 23:00	92.6	300.1	2	118.7		153.4	159.2	1	102.7	
12/8/2005 0:00	71.3	307	2	119.3		270.3	59.1	1	99.5	
12/8/2005 1:00	84.3	373.6	2	118.5		155.4	86.4	1	96	
12/8/2005 2:00	111.9	413.7	2	119.4		242.9	207.1	1	99.6	
12/8/2005 3:00	204.3	432.1	2	118.9		252.2	122.1	1	99.2	
12/8/2005 4:00	216.3	404.3	2	118.8		243.1	160.7	1	105	
12/8/2005 5:00	134.9	418.2	2	120.3		516.1	85.9	1	105	
12/8/2005 6:00	197.1	316.9	2	120.8		460.1	78.9	0.9	104.1	

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/8/2005 7:00	208.2	298.8	2	121.8	336.1	42.2	1	85.5
12/8/2005 8:00	191.8	332.7	2	107.3	443.7	102.2	1	95.5
12/8/2005 9:00	183.1	304.7	2	110.6	291.4	134	1	96.2
12/8/2005 10:00	475.3	267.8	2	109.6	394.7	123.4	1	98.1
12/8/2005 11:00	332.6	143.7	2	111.3	292.5	119.2	1	99.5
12/8/2005 12:00	251.8	98.8	2	109.1	228.6	114.4	1	100.1
12/8/2005 13:00	398.6	162.4	2	106.1	256.6	92.3	1	100.9
12/8/2005 14:00	78.1	378	2	112.7	291.4	65.7	1	101
12/8/2005 15:00	121.5	243.1	2	115.6	234.2	68.2	1	101
12/8/2005 16:00	210.3	251.4	2	116.9	130.2	52.1	1	100.5
12/8/2005 17:00	149.6	298.9	2	118.6	80.6	83.6	1	95.2
12/8/2005 18:00	125.1	238.5	2	117.9	116.1	177.3	1	98.7
12/8/2005 19:00	162.4	271.6	2	118.7	229	78.3	1	101
12/8/2005 20:00	66.4	407.4	2	118.9	207.8	66.4	1	102.5
12/8/2005 21:00	74.6	528	2	118.9	111.1	43.6	1	95.1
12/8/2005 22:00	72.7	609.1	2	119.2	73.3	139.8	1	96.8
12/8/2005 23:00	75	604.9	2	118.9	225.1	132.8	1	101.7
12/9/2005 0:00	77.6	551.7	2	119	69.7	68.4	1	95.4
12/9/2005 1:00	83.8	505.9	2	119.1	190	144.3	1	101.2
12/9/2005 2:00	82.2	588.7	2	119	191	84.1	1	102.5
12/9/2005 3:00	91.4	495.3	2	119.1	243.2	106.7	1	105
12/9/2005 4:00	91.1	508.3	2	118.9	257.9	58.3	1	105.5
12/9/2005 5:00	249.1	225.5	2	119.1	384.6	49.1	1	97.9
12/9/2005 6:00	92.7	565.6	2	119	72	52.2	1	92.3
12/9/2005 7:00	93.3	464.9	2	118.9	261.5	217.3	1.6	94
12/9/2005 8:00	80.4	363.2	2	119.3	114.1	105.5	2	95.2
12/9/2005 9:00	76.1	390.2	2	118.6	129.2	103.1	2	101.2
12/9/2005 10:00	314.3	210.6	2	114.9	185.9	79.5	2	104.1
12/9/2005 11:00	94.8	206	2	113.6	110.4	49.6	2	107.1
12/9/2005 12:00	461.5	125.2	2	112.3	273.2	86.6	1	97.8
12/9/2005 13:00	67.7	234.1	2	114.3	58.3	127.3	1	99.6
12/9/2005 14:00	79.1	265	2	118.8	68.9	193.8	1	103.4
12/9/2005 15:00	137	106.7	2	109.2	63.8	211.2	1	105
12/9/2005 16:00	118.8	223.5	2	109.5	194.1	179.9	1.1	105
12/9/2005 17:00	120	158.8	2	101.3	65.1	93.4	1.1	104.9
12/9/2005 18:00	396.3	132.8	2	102.1	68.3	53.9	1	105.2
12/9/2005 19:00	77	274.8	2	103.5	86	165.1	1	105.4
12/9/2005 20:00	426.9	190	1.5	96.6	660.6	236.9	1	94.3
12/9/2005 21:00	120.5	78.6	2	102.3	66.3	323.3	1.4	108
12/9/2005 22:00	107.1	145	2	106.1	179.7	370.5	1.2	102.8
12/9/2005 23:00	134.1	197.4	2	116	57.2	282.5	1.5	104.1
12/10/2005 0:00	488.7	151.9	2	113.9	69.9	415.6	1.6	118
12/10/2005 1:00	231.3	192.6	2	116.4	81.4	360	1.6	123.5
12/10/2005 2:00	140.1	238.5	2	117	91.1	216.8	1.6	127.1
12/10/2005 3:00	89.5	299.8	2	118.6	103.3	91.8	1.6	128.3
12/10/2005 4:00	74.4	281.3	2	118.8	138.5	42.2	1.6	127.9
12/10/2005 5:00	73.9	465.3	2	119.2	228.3	48.4	1.6	127.5
12/10/2005 6:00	74.9	489.4	2	119.2	206.3	55.6	1.2	122.2
12/10/2005 7:00	86.7	562.3	2	119	146.4	56	1	123.3
12/10/2005 8:00	93.8	603.5	2	119	81.9	119.8	1	128.7
12/10/2005 9:00	79.8	515.8	2	119	84.8	110.5	1	131.6
12/10/2005 10:00	60.8	604.9	2	119	87.1	89.1	1	132
12/10/2005 11:00	67.7	597	2	118.8	90	46.1	1	132
12/10/2005 12:00	77.7	633.7	2	119	87.6	50	1	132
12/10/2005 13:00	72.8	666.4	2	119.1	90.6	48.9	1	132.1
12/10/2005 14:00	58.2	636.4	2	119	94.8	84.5	1	132.3
12/10/2005 15:00	58.3	735.2	2	119	84.2	94.8	0.9	132.1
12/10/2005 16:00	57.5	800.2	2	119.2	315.7	34.7	1	105.6
12/10/2005 17:00	58.4	791.4	2	119.1	64	196.2	1	123.7
12/10/2005 18:00	59.1	842.9	2	119.2	186	190.5	1.4	137.9
12/10/2005 19:00	208.4	381.6	2	119.3	89.8	48.5	1	127.7
12/10/2005 20:00	73	257.4	2	118.7	72.3	85	1	112.2
12/10/2005 21:00	67.8	156.6	2	118.7	83.7	174	1.1	129.5
12/10/2005 22:00	83.4	571.2	2	119	347.9	73.1	1	120
12/10/2005 23:00	72.9	711.5	2	119.2	79.2	112.4	1	122.5
12/11/2005 0:00	111	410.4	2	121.2	80.1	126.5	1	127.8
12/11/2005 1:00	271.5	434.2	2	119.3	123.9	74.5	1	133.7
12/11/2005 2:00	72.8	718	2	119.1	152.3	39.6	1	132.8
12/11/2005 3:00	68.8	802.7	2	119.1	119.2	21.1	1	120
12/11/2005 4:00	60.8	660.3	2	119.1	83.1	61.5	1	120.5
12/11/2005 5:00	72	661.2	2	118.7	117.5	86.6	1	120

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/11/2005 6:00	76.3	690.3	2	119.2	73.7	118.8	1	123.8
12/11/2005 7:00	69.5	719.5	2	118.9	80.2	152	1	127.9
12/11/2005 8:00	70.9	686.9	2	118.9	83.4	110	0.9	127.9
12/11/2005 9:00	69.3	748.7	2	119	83.6	111.2	1	128.1
12/11/2005 10:00	65.4	723.6	2	119.2	80.4	86.8	1	128
12/11/2005 11:00	75.9	777.1	2	119	79.8	83	1	128.1
12/11/2005 12:00	77.9	801.5	2	118.8	82.6	66.3	1	128.2
12/11/2005 13:00	68.2	805.8	2	119.1	85.1	69.3	1	130
12/11/2005 14:00	66.9	922.8	1.8	121.6	91.6	77.6	1	130.1
12/11/2005 15:00	48.3	179	3.2	4.7	103.9	52.4	1	130.2
12/11/2005 16:00	22.9	2.9	1.1	0	94.6	63.3	1	130.2
12/11/2005 17:00	14.3	1.8	0	0	93.2	61.2	1	130.2
12/11/2005 18:00	11.8	1.6	0	0	105.4	80.2	1	130.3
12/11/2005 19:00	9.5	1.2	0	0	94.7	125.8	1	130.1
12/11/2005 20:00	8.5	1.2	0	0	94.8	123.4	1	130.2
12/11/2005 21:00	8.5	1.3	0	0	103.1	169.9	1	130.1
12/11/2005 22:00	8.1	1.3	0	0	99.6	227.5	1.8	130.1
12/11/2005 23:00	7.9	1.3	0	0	96.4	159.8	2.5	130.3
12/12/2005 0:00	8	1.3	0	0	99.2	224.4	2.6	132.8
12/12/2005 1:00	8	1.1	0	0	152.4	149.7	2.2	134.9
12/12/2005 2:00	8	1.2	0	0	136.1	272.9	2	137.6
12/12/2005 3:00	7.9	1.1	0	0	314.9	168.6	2	141
12/12/2005 4:00	8.2	0.9	0	0	325.1	172.7	2	141.2
12/12/2005 5:00	8.2	1.3	0	0	386.7	51.3	2	141.4
12/12/2005 6:00	7.9	1.2	0	0	333.5	81.3	2	141.3
12/12/2005 7:00	8.1	1	0	0	378.9	56.6	1.8	141.5
12/12/2005 8:00	8.7	1.2	0	0	293.4	40.4	1.5	141.2
12/12/2005 9:00	8.1	1.4	0	0	569.4	31.9	1.5	136.7
12/12/2005 10:00	8.4	1.5	0	0	542	14.2	1.5	125.5
12/12/2005 11:00	8.5	1.5	0	0	157.5	33.5	1.5	125.6
12/12/2005 12:00	8.3	1.7	0	0	108.2	114.9	1.7	127.4
12/12/2005 13:00	8.7	1.5	0	0	115.8	140.4	1.9	136.7
12/12/2005 14:00	8.4	1.2	0	0	211.9	45.2	1.5	139
12/12/2005 15:00	7.8	1.2	0	0	159	73.6	1.5	139.2
12/12/2005 16:00	8.3	1.6	0	0	177.6	35.8	1.5	139.1
12/12/2005 17:00	8.2	1.8	0	0	222.4	17	1.4	138.9
12/12/2005 18:00	8.1	1.6	0	0	291.2	12.9	1.3	109.6
12/12/2005 19:00	8.3	1.4	0	0	73.9	459.1	1.4	131.5
12/12/2005 20:00	8.4	1.5	0	0	154.3	199	1.7	147.6
12/12/2005 21:00	8.7	1.6	0	0	280.6	115.9	2.1	147.5
12/12/2005 22:00	8.3	1.4	0	0	301.1	103.9	1.9	147.5
12/12/2005 23:00	8.2	1.4	0	0	225.2	165.5	0.9	147.6
12/13/2005 0:00	8.5	1.6	0	0	464.4	117.9	1.7	146
12/13/2005 1:00	8.4	1.4	0	0	367.8	100.1	1.6	145.9
12/13/2005 2:00	8.4	1.6	0	0	461.7	27.4	1.7	145.2
12/13/2005 3:00	8.4	1.4	0	0	300.9	13.1	1.6	138.4
12/13/2005 4:00	8.3	1.5	0	0	205.3	11.6	1.6	131.8
12/13/2005 5:00	8.4	1.4	0	0	184.7	17.8	1.5	131.4
12/13/2005 6:00	8.2	1.7	0	0	209.1	26.6	1.5	131.8
12/13/2005 7:00	8.1	1.5	0	0	151.4	36.8	1.4	134.4
12/13/2005 8:00	8.9	1.7	0	0	130.4	52.1	1.3	134.3
12/13/2005 9:00	8.5	1.5	0	0	146.5	52.6	1.3	134.1
12/13/2005 10:00	8.4	1.6	0	0	105.8	112.2	1.3	134.5
12/13/2005 11:00	8.6	1.4	0	0	146	158.5	1.5	134.3
12/13/2005 12:00	8.6	1.6	0	0	96.2	213.3	1.5	135.5
12/13/2005 13:00	8.7	1.5	0	0	123.4	112.9	1.4	136.8
12/13/2005 14:00	8.5	1.6	0	0	99	141.1	1.4	138.3
12/13/2005 15:00	8.6	1.6	0	0	93.5	195.4	1.3	138.1
12/13/2005 16:00	8.9	1.3	0	0	92.3	198	1.1	139.1
12/13/2005 17:00	8.9	1.5	0	0	90.8	161.2	1	139.1
12/13/2005 18:00	9	1.2	0	0	87.4	170.8	1	138.9
12/13/2005 19:00	8.6	1.5	0	0	92.1	165.6	0.9	139.2
12/13/2005 20:00	8.4	1.3	0	0	92.3	131.2	0.9	139
12/13/2005 21:00	8.4	1.1	0	0	95.4	112.8	0.8	139.1
12/13/2005 22:00	8.5	1.2	0	0	98.8	115.4	0.8	139.1
12/13/2005 23:00	8.9	1.5	0	0	99.1	114.8	0.8	139.1
12/14/2005 0:00	8.7	1.4	0	0	91.1	263.9	0.7	139.2
12/14/2005 1:00	8.6	1.2	0	0	92.9	342.4	0.7	139.5
12/14/2005 2:00	8.8	1.2	0	0	92.1	314.5	0.7	140.1
12/14/2005 3:00	8.8	1.3	0	0	90.1	301.5	0.7	140
12/14/2005 4:00	8.9	1.5	0	0	88.8	278.1	0.7	140.1

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/14/2005 5:00	9.2	1.4	0	0	91	276.5	0.7	140.1
12/14/2005 6:00	8.9	1.5	0	0	93	266.2	0.6	140.1
12/14/2005 7:00	8.5	1.4	0	0	95	233.7	0.6	140
12/14/2005 8:00	9.2	1.3	0	0	156.4	198.5	0.6	140.1
12/14/2005 9:00	8.4	1.4	0	0	88	245.4	0.6	140.1
12/14/2005 10:00	8.8	1.2	0	0	116.4	179.4	0.8	140
12/14/2005 11:00	9	1.5	0	0	200.1	107.4	0.8	138.9
12/14/2005 12:00	8.7	1.6	0	0	195.3	60.4	0.8	136.6
12/14/2005 13:00	8.5	1.6	0	0	134.4	45.8	0.8	131.1
12/14/2005 14:00	8.7	1.7	0	0	203.9	71.9	0.8	127.2
12/14/2005 15:00	8.9	1.4	0	0	79.7	405.3	0.8	126.9
12/14/2005 16:00	9.4	1.6	0	0	81.9	545	0.7	127.8
12/14/2005 17:00	9.3	1.5	0	0	976.3	220	0.8	117.4
12/14/2005 18:00	25.3	1.4	0	0	169.5	440.2	0.8	131.6
12/14/2005 19:00	77.2	1.5	0	0	87.1	400.3	0.8	137.7
12/14/2005 20:00	82.3	2.1	0	0	238.1	56.9	0.7	117.8
12/14/2005 21:00	86.3	2.5	0	0	84.3	381.3	0.7	126.9
12/14/2005 22:00	87	3.3	0	0	78.2	70.1	0.7	120
12/14/2005 23:00	87.4	3.4	0	0	77.9	127.3	0.7	120.1
12/15/2005 0:00	88.1	3.6	0	0	78.2	167	0.7	122.7
12/15/2005 1:00	85.5	4.6	0	0	86.2	145.6	0.6	124.9
12/15/2005 2:00	60.1	4	0	0	99.1	79.4	0.6	124.9
12/15/2005 3:00	95.1	4.6	0	0	168.5	59.6	0.6	125
12/15/2005 4:00	90.8	5.1	0	0	109.9	47.1	0.6	125.1
12/15/2005 5:00	82.5	5.6	0	0	128.5	61.4	0.5	125
12/15/2005 6:00	65.9	6.1	0	0	163	88.2	0.5	125
12/15/2005 7:00	41.3	6.4	0	0	157.2	147.5	0.4	125.1
12/15/2005 8:00	33.2	6.7	0	0	141.3	178.8	0.5	124.9
12/15/2005 9:00	20.8	7.3	0	0	169.9	289	0.6	126.4
12/15/2005 10:00	13.5	8.6	0	0	225.8	163	0.6	128
12/15/2005 11:00	9.8	9.3	0	0	453.7	182.6	0.6	123.4
12/15/2005 12:00	7.3	10.5	0	0	413.2	91.4	0.6	120.1
12/15/2005 13:00	6.8	11.1	0	0.4	102.6	249.7	0.7	120.1
12/15/2005 14:00	6.4	10.5	0	0	73.5	425	0.8	125.2
12/15/2005 15:00	5.3	10.5	0	0	91.8	248.2	0.8	131.2
12/15/2005 16:00	969.9	143.2	0	31.6	183.6	96.7	1.2	132.1
12/15/2005 17:00	204.8	316.4	0	45.2	244.9	107.9	1.8	122.7
12/15/2005 18:00	251	299.9	1	83.4	95.7	164.2	1.7	120.1
12/15/2005 19:00	60.7	88.9	1.9	94.3	130.1	172.1	1.5	120
12/15/2005 20:00	67.8	376.7	1.5	109.9	86.9	248	1.5	120
12/15/2005 21:00	1098.6	145.2	0.2	29.1	86.1	340.9	1.5	121.3
12/15/2005 22:00	13.2	1.7	1.3	0	82.6	530.5	1.2	129.7
12/15/2005 23:00	12.4	2	2.6	0.1	84.6	172.9	0	116.9
12/16/2005 0:00	10.9	1.6	0	0	67.2	304.1	0	110.6
12/16/2005 1:00	15.5	1.5	0	0	252.5	455.5	0	114.2
12/16/2005 2:00	17.2	1.4	0	0	142.3	163.5	0	88.5
12/16/2005 3:00	10.3	1.4	0	0	52.8	309	0	94.8
12/16/2005 4:00	9.3	1.3	0	0	63	357	0	104
12/16/2005 5:00	9.5	1.4	0	0	169.5	210.6	0	102.9
12/16/2005 6:00	9.6	1.4	0	0	61.5	215.1	0	100.1
12/16/2005 7:00	10	1.2	0	0	62	343.3	0	99.9
12/16/2005 8:00	11	1.3	0	0	72.7	473.1	0	101.8
12/16/2005 9:00	10.2	1.4	0	0	270.6	383.6	0	105.1
12/16/2005 10:00	10.6	1.6	0	0	202.4	331.4	0	105.2
12/16/2005 11:00	9.6	1.5	0	0	693.8	323.4	0	105.2
12/16/2005 12:00	29.9	1.8	0	0	417.3	221.4	0	105.3
12/16/2005 13:00	81.8	4.7	0	0	228.6	257.2	0	105.3
12/16/2005 14:00	84.4	4.6	0	0	366.9	212	0	38.1
12/16/2005 15:00	90.7	3.3	0	0	23	1.5	0	0
12/16/2005 16:00	84.2	4.7	0	0	1.7	0.9	0	0
12/16/2005 17:00	87.5	5.2	0	0	0.2	0.9	0	0
12/16/2005 18:00	117.7	6.1	0	0.1	0	0.8	0	0
12/16/2005 19:00	322.4	5.4	0	0	0.1	0.6	0	0
12/16/2005 20:00	11.1	6.7	0	0	0	0.7	0	0
12/16/2005 21:00	8.4	8.2	0	0	107.2	3.9	0	0
12/16/2005 22:00	7.4	10.9	0	0.1	74.1	8.2	0	0
12/16/2005 23:00	6.5	10.3	0	0.1	0.2	9.4	0.3	19.6
12/17/2005 0:00	6	9.8	0	3.1	143	72.9	1	50.4
12/17/2005 1:00	21.5	7.9	0	5.3	37.9	88.1	1	61.9
12/17/2005 2:00	9.5	1.4	0	0	36.9	341	1	80.3
12/17/2005 3:00	9.1	1.2	0	0	50.6	393.4	1	94.6

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/17/2005 4:00	20.6	4.4	0	0	62.6	434.9	0.9	113.8
12/17/2005 5:00	7.1	9.2	0	0	61.2	194.2	0.3	119.8
12/17/2005 6:00	9.7	12.8	0	3.5	56.9	120	0	115.4
12/17/2005 7:00	61.3	4.1	0	0.1	56	144.6	0	115
12/17/2005 8:00	73.5	3.5	0	0	60.1	197.9	0	112.4
12/17/2005 9:00	52.5	6.5	0	0	62.1	536.6	0	112.5
12/17/2005 10:00	34.7	7.2	0	0	67.8	688.6	0	119.7
12/17/2005 11:00	9	8.6	0	0	70.8	586.6	0	121
12/17/2005 12:00	7.2	9.4	0	0	71.4	686.6	0	124.7
12/17/2005 13:00	12.5	10.8	0	0	75	831.4	0	130.7
12/17/2005 14:00	12.8	9.6	0	0	73.9	761.6	0	132.7
12/17/2005 15:00	7.4	9.4	0	0	72.3	476.9	0	131.9
12/17/2005 16:00	7.6	9.4	0	0	73.9	515.9	0	135.8
12/17/2005 17:00	7.3	9.3	0	0	79.9	645.2	0	137.9
12/17/2005 18:00	7	11.7	0	7.8	85.6	411.8	0	138
12/17/2005 19:00	43.8	15.6	0	31.4	89.5	308.3	0	138
12/17/2005 20:00	56.2	17.1	0	34.8	88.8	307.2	0	138.2
12/17/2005 21:00	52.2	32.9	0	32.1	111.9	284.1	0	137.8
12/17/2005 22:00	381	6.7	0	0	122	342.1	0	138
12/17/2005 23:00	18.1	2	0	0	115	342.6	0	138
12/18/2005 0:00	41.2	10.6	0	0	88.9	249.3	0	134.3
12/18/2005 1:00	10.4	14.1	0	0	78.8	334.3	0.1	130.1
12/18/2005 2:00	15.4	9.1	0	0	87.2	282	0	130
12/18/2005 3:00	58	1.6	0	0	75.2	384.2	0	134.2
12/18/2005 4:00	9.8	1.4	0	0	86.2	378.8	0	135.7
12/18/2005 5:00	9.3	1.4	0	0	126.3	588.6	0	142.2
12/18/2005 6:00	9.4	1.2	0	0	145.7	435.2	0	145
12/18/2005 7:00	9.2	1.2	0	0	224.3	203.7	0	141.4
12/18/2005 8:00	10.2	1.3	0	0	137.3	271	0	140
12/18/2005 9:00	9.3	1.1	0	0	85.5	230.2	0	138.1
12/18/2005 10:00	9.3	1.3	0	0	74.5	185.4	0	129.9
12/18/2005 11:00	9.1	1.1	0	0	89.5	213.2	0	130.7
12/18/2005 12:00	9.2	1.2	0	0	125.3	289.4	0	130
12/18/2005 13:00	9.4	1.2	0	0	83.6	355.7	0	131.4
12/18/2005 14:00	9	1.5	0	0	76.2	391	0	129.9
12/18/2005 15:00	8.9	1.4	0	0	77.5	714.4	0	135.1
12/18/2005 16:00	9	1.4	0	0	144.2	337.7	0	136.3
12/18/2005 17:00	112.8	1.9	0	0	83.4	239.7	0	135.5
12/18/2005 18:00	165.3	4.1	0	0	80.7	200.7	0	130
12/18/2005 19:00	127.5	5	0	0	77.5	211.5	0	130.1
12/18/2005 20:00	40.4	8.3	0	0	82.2	205.4	0	129
12/18/2005 21:00	12.5	11.7	0	0	79.8	319.2	0	120.3
12/18/2005 22:00	168.4	11.1	0	2.2	69.2	337.1	0	128.2
12/18/2005 23:00	475.9	2	0	0	73.1	319.4	0	132.8
12/19/2005 0:00	96	8.2	0	0	74.5	310.8	0	133
12/19/2005 1:00	8.6	12.3	0	0	74.7	300.5	0	133.1
12/19/2005 2:00	7.6	13	0	0	79	263.2	0	132.9
12/19/2005 3:00	7.1	19.5	0	0.4	76.8	262.9	0	133
12/19/2005 4:00	17.3	95.7	0	28.7	108.4	259.8	0	133
12/19/2005 5:00	303.3	185.6	0	66.1	73.8	270.9	0	134.3
12/19/2005 6:00	56.8	227	0	73.5	76.2	218.7	0	135.2
12/19/2005 7:00	47.2	320.7	0	79	72.1	216.9	0	133.5
12/19/2005 8:00	53.6	344.8	0	85.4	72.4	234.5	0	134.4
12/19/2005 9:00	58.1	376.3	0	91.5	75.7	305	0	136.9
12/19/2005 10:00	65.3	301.1	0	96.7	77.6	279	0	135.1
12/19/2005 11:00	138.2	306.9	0	101.4	74.4	320.8	0	135.1
12/19/2005 12:00	68.3	376.3	0.7	103.4	136.7	358.2	0	135
12/19/2005 13:00	157.8	409.2	1.5	106.1	76.3	270.9	0	135
12/19/2005 14:00	227.9	348.9	1.5	115.6	76.1	180.6	0	135.1
12/19/2005 15:00	75.4	471.8	1.5	119.5	201.4	151.7	0	129.5
12/19/2005 16:00	77.2	522.5	1.5	120.2	65.3	117.8	1.4	124.9
12/19/2005 17:00	78.2	610.1	1.5	120.7	128	39.6	1.5	125
12/19/2005 18:00	76.1	577.2	1.5	122	67.3	158.1	1.5	125
12/19/2005 19:00	85	624.4	1.5	123.5	71.9	142.6	1.5	125
12/19/2005 20:00	242.3	531.9	1.5	126.8	72.1	201.4	1.5	125.4
12/19/2005 21:00	150.1	617.5	1.5	128.5	107.4	231.6	1.5	128.1
12/19/2005 22:00	80.6	758.5	1.5	130.3	77.6	201.8	1.5	129.9
12/19/2005 23:00	87.9	817	1.5	130.2	79.5	288.5	1.5	130
12/20/2005 0:00	193.8	643.7	1.5	130.1	80.2	221.9	1.5	130
12/20/2005 1:00	266.9	339	1.5	130.9	80.4	185	1.5	130
12/20/2005 2:00	360.1	245.5	1.5	130.6	78.1	343.1	1.5	132.1

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/20/2005 3:00	366.5	341.7	1.5	133.5	94.2	244.7	1.5	135.5
12/20/2005 4:00	353.9	303.3	1.5	130.2	100.4	174.3	1.5	138
12/20/2005 5:00	245.4	245	1.5	130.3	175.1	48.3	1.5	136
12/20/2005 6:00	261.5	261.1	1.5	131.9	93.3	60.6	1.5	135.1
12/20/2005 7:00	379.5	130	1.5	128.1	157	39.7	1.5	135
12/20/2005 8:00	352	230.8	1.9	129.5	95.1	68.6	1.5	135
12/20/2005 9:00	282.4	179.9	2.8	134	97.2	63.6	1.5	135.1
12/20/2005 10:00	194.6	151.7	2.5	133.3	91.1	70.9	1.5	135
12/20/2005 11:00	233.7	68.1	2.5	135.8	154.8	78.9	1.5	135
12/20/2005 12:00	203.5	102	1.7	135.7	91	90.8	1.5	134.7
12/20/2005 13:00	170.5	147.4	1.6	136.5	189.5	89.2	1.5	135.1
12/20/2005 14:00	217	133.4	1.5	136.3	203.4	104.5	1.5	135
12/20/2005 15:00	135.8	124.5	1.7	136.5	213.9	127.8	1.5	134.9
12/20/2005 16:00	187.4	156.2	2	139.1	168.3	94.4	1.5	135
12/20/2005 17:00	243.6	123.5	2.4	142.1	133.2	81.4	1.5	134.9
12/20/2005 18:00	204.9	107.7	2	140.1	225.4	88.8	1.5	135.2
12/20/2005 19:00	184.5	144.6	2	140.1	174.3	130.4	1.5	134.9
12/20/2005 20:00	319.6	121.5	2	139.9	123.3	110.2	1.5	135.1
12/20/2005 21:00	305.7	115.7	2	136.6	283.9	113.1	1.5	135.1
12/20/2005 22:00	299.4	217.8	2	140	139.1	80.8	1.5	137.2
12/20/2005 23:00	122.2	325.1	2	140	86.8	225.3	1.5	140
12/21/2005 0:00	115.1	399.8	2	139.9	90.6	127.4	1.5	140
12/21/2005 1:00	180.8	403.9	2	140	153.8	172.3	1.5	140
12/21/2005 2:00	255.9	261	2	136.2	311	139	1.5	140.1
12/21/2005 3:00	544.3	333.1	2	133.7	384.5	69.5	1.5	136.5
12/21/2005 4:00	423.8	181.3	2	131.2	240.2	273.6	0.4	125
12/21/2005 5:00	282.4	373.8	2	135.1	256.6	246.5	0	122
12/21/2005 6:00	174.5	403.5	2.3	137.9	69.2	312.2	0	130.1
12/21/2005 7:00	305.3	178.7	3.2	139	76.6	325.9	0	132.5
12/21/2005 8:00	447.7	231.5	2.6	133.9	81.1	148.8	1.3	134
12/21/2005 9:00	202	321.6	3.5	138.8	97.6	56.4	1.5	134.1
12/21/2005 10:00	197.1	163.7	3.6	140.3	102.7	71.5	1.5	133.9
12/21/2005 11:00	257.7	73	3	141.9	102.4	139.9	1.5	134.1
12/21/2005 12:00	192.3	140	1.5	142.3	89.6	160.9	1.5	133.9
12/21/2005 13:00	123.9	184.3	2.3	142.2	182.3	137	1.5	134
12/21/2005 14:00	183.6	160.3	3.2	142.1	128.1	107.9	1.5	133.9
12/21/2005 15:00	191	191.6	4.1	144.1	158.5	126.3	1.5	133.9
12/21/2005 16:00	129.7	161.3	4.5	144.2	136.5	389.2	1.6	134
12/21/2005 17:00	258.9	140.6	2.1	113.3	73.1	466.2	2	132.1
12/21/2005 18:00	240.9	495.4	2	118.7	80.8	420.9	1.3	141.4
12/21/2005 19:00	233.6	465.8	2	119.1	155.8	98.4	1.9	139.2
12/21/2005 20:00	123.8	541.2	2	118.7	131.8	8.2	2	131
12/21/2005 21:00	120.9	574.6	2	119.2	122.2	15.3	2	125.9
12/21/2005 22:00	66.7	658.1	2	119	74.3	110.1	2	121
12/21/2005 23:00	66.6	511.4	2	119	112.1	416.2	2	134
12/22/2005 0:00	63.9	242.6	2	118.8	131.4	349.4	2	143.3
12/22/2005 1:00	63.2	142	2	119	301.7	168.7	2	147.5
12/22/2005 2:00	64.3	128.4	2	118.8	104	9.4	2	124.2
12/22/2005 3:00	64.8	87.6	2	113.4	77.4	70.6	2	129
12/22/2005 4:00	61.8	101.1	2	110.2	87.8	28.3	2	129.9
12/22/2005 5:00	62.8	215.6	2	113.7	86.1	14.9	2	125.7
12/22/2005 6:00	62.9	288	2	112.1	93	27.5	2	123.4
12/22/2005 7:00	64.1	453.4	2.5	113.9	91	112.2	2	129.1
12/22/2005 8:00	68.5	466.3	3.1	116.2	97.9	82.2	2	125.1
12/22/2005 9:00	66.5	475.8	4	118.6	123.3	206.5	2	126.2
12/22/2005 10:00	69	486.9	4	119	113.2	191.9	2	127
12/22/2005 11:00	69.9	553.1	3.9	119	91.3	115.2	2	126.9
12/22/2005 12:00	71.1	565	4	119.1	90.1	180.7	2	126.3
12/22/2005 13:00	72.2	587.9	4	120.5	86.1	219.9	2	128
12/22/2005 14:00	71.6	609.9	4	119.6	116.7	95.6	1.8	130.2
12/22/2005 15:00	93.8	645	4.3	119.1	154.2	144.6	1.5	129.7
12/22/2005 16:00	64.2	626.4	2.6	119.1	97.7	105.8	1.5	130.1
12/22/2005 17:00	62.7	784.1	3.7	118.8	104.8	101.8	1.5	130
12/22/2005 18:00	67.6	685.8	2.6	118.7	170.7	123.5	1.5	129.8
12/22/2005 19:00	53.1	109	2.8	90.5	100.9	149.9	1.5	130.2
12/22/2005 20:00	105.6	112.8	3.5	113.4	167.6	135.7	1.5	129.9
12/22/2005 21:00	111.3	19.5	3.5	118.6	152.4	140.8	1.5	130.1
12/22/2005 22:00	117.5	11.9	3.5	119	366.5	115.6	1.5	130.2
12/22/2005 23:00	308.1	11.7	3.5	109.2	568.3	108.9	1.5	129.7
12/23/2005 0:00	116.3	11.6	3.2	108.3	212.2	200.6	1.7	130.1
12/23/2005 1:00	65	76.9	2.5	109.8	554.7	204.9	2	133.2

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/23/2005 2:00	64.5	80.8	2.5	109.1	672.4	145	1.7	133.6
12/23/2005 3:00	59.4	117.3	2.5	107.9	198	169.1	1.9	130
12/23/2005 4:00	53.8	124.1	2.5	104.5	315.1	198.2	2.1	131.8
12/23/2005 5:00	55.5	237.5	2.5	105.8	169.4	193.8	1.9	137.6
12/23/2005 6:00	103.7	206.5	2.5	106.6	298	84.7	1.7	134.4
12/23/2005 7:00	55.9	176.3	2.5	104.7	411.7	61.1	1.5	129.9
12/23/2005 8:00	232.8	306.6	2.5	104.5	156.3	67.6	1.5	130.1
12/23/2005 9:00	68.8	497.2	2.5	105.1	335.2	225.5	1.5	129.9
12/23/2005 10:00	59.9	0	2.5	111.8	147	130.6	1.5	130.1
12/23/2005 11:00	132.3	437.1	3.4	117.5	174.9	115	1.9	130
12/23/2005 12:00	146	288.5	4.5	118.9	123	109.1	2	129.9
12/23/2005 13:00	116.8	207.2	4.5	119	233.6	110.6	2	130.4
12/23/2005 14:00	70	100.6	4.5	119	221	362.1	1.9	130
12/23/2005 15:00	71.5	76.6	4.5	118.9	89.7	463.4	2.1	142.6
12/23/2005 16:00	73.3	69.3	4.5	118.9	966.3	225.8	2	139.4
12/23/2005 17:00	62.9	52.8	4.2	119.1	162.3	44.8	2	131.2
12/23/2005 18:00	62.2	180.1	3.6	119	124	68.4	1.9	131.1
12/23/2005 19:00	162.4	243.1	4	119.2	98.6	19.7	1.9	131.1
12/23/2005 20:00	70.5	197.2	4.6	119	208	8.9	1.8	131.3
12/23/2005 21:00	210.4	104.4	4.5	119.1	255.1	8.7	1.8	128.2
12/23/2005 22:00	201.5	83.5	4.5	118.9	160.7	4.6	1.8	100.7
12/23/2005 23:00	111.3	97.4	3.8	119	66.2	175.8	1.8	119.5
12/24/2005 0:00	209.4	118.8	3.5	118.7	104.1	33.8	1.6	125.6
12/24/2005 1:00	158.9	22.8	3.5	114.2	190.1	16.2	1.5	122.2
12/24/2005 2:00	94.4	78	2.6	102.7	550.9	43.4	1.5	124.1
12/24/2005 3:00	56.4	215.7	2.8	110.3	149.2	10.3	1.3	118.4
12/24/2005 4:00	61.4	172.4	3.1	116.1	130.5	60.8	1.4	116.3
12/24/2005 5:00	63	88.1	3.2	118.2	199.8	91.7	1.5	122.4
12/24/2005 6:00	62.2	74.4	1.9	118.4	129.1	34.1	1.5	122.8
12/24/2005 7:00	103.7	169.8	2.5	105.5	143	17.2	1.5	110.8
12/24/2005 8:00	102.5	109.7	3.8	114.7	77.4	174.2	1.6	118.3
12/24/2005 9:00	61.4	93.5	2.5	116.9	239.9	70.1	1.7	126.8
12/24/2005 10:00	60.7	183.3	2.8	117	566.7	16.3	1.5	115
12/24/2005 11:00	62.1	189.6	3.5	118.9	75.4	155.8	1.8	121.7
12/24/2005 12:00	65.2	139.6	3.7	119	195.7	27.5	2	119.3
12/24/2005 13:00	64	230	3.8	118.9	72.7	136	2	111.9
12/24/2005 14:00	79.5	278.9	4	118.3	80.5	124.2	2	124.8
12/24/2005 15:00	103.8	403.9	4.5	119.2	141.3	30.5	2	125
12/24/2005 16:00	205	270.1	5	119.3	104.2	28.3	2	126.3
12/24/2005 17:00	365.5	122.4	5	119.2	157.4	8.2	2	124.5
12/24/2005 18:00	163.7	269.4	5	118.8	235.2	21.6	2	115.8
12/24/2005 19:00	145.6	241.7	5	119	188.4	193.7	2	125.2
12/24/2005 20:00	70.2	175.3	5	119	229.6	47	2	124.3
12/24/2005 21:00	73.1	14.1	5	116.7	454.2	56.2	2	118.5
12/24/2005 22:00	59.7	37.6	5	114.6	676.1	151.8	2	123.5
12/24/2005 23:00	108.8	77.4	5	118.8	124	74.4	2	124.3
12/25/2005 0:00	68.2	21.2	4.7	119.2	160.9	71	1.9	124.7
12/25/2005 1:00	60	148.1	3.7	117	213.4	132.9	1.9	122
12/25/2005 2:00	59.2	139.5	4.1	116.9	378.4	202.8	1.9	127.4
12/25/2005 3:00	62	152.2	4.2	116.9	319	39.7	1.9	124.8
12/25/2005 4:00	63.3	123.4	4.2	117	117.8	69.9	1.9	122.3
12/25/2005 5:00	78	57.3	4.2	117	89.6	158.3	1.8	128.1
12/25/2005 6:00	75.3	55.1	4	117.1	214.5	14	1.9	124
12/25/2005 7:00	74.7	159.9	4.1	116.8	159.6	11.5	1.9	120.1
12/25/2005 8:00	287.4	113.8	4.5	116.7	430.8	102	0.5	118
12/25/2005 9:00	219.9	232.1	4.5	117.4	216.5	305.5	0	110
12/25/2005 10:00	293.6	241.6	4.5	119.3	74	406.9	0	116
12/25/2005 11:00	447.6	134.4	4.5	118	76.4	267.8	0.3	116
12/25/2005 12:00	731.1	26.1	4.5	113.1	473.4	130.6	1.8	116
12/25/2005 13:00	372.3	16.8	4.5	81.3	76.3	135.2	2	116.3
12/25/2005 14:00	493.7	249.3	4.5	90.3	114.1	361.3	2	120.1
12/25/2005 15:00	172.8	201.3	4.5	102.8	163.9	246.4	2	136.3
12/25/2005 16:00	447.3	249.3	4.8	108.9	285.2	31	2	131.3
12/25/2005 17:00	295.4	115.8	5	110	225.6	18.6	2	129.4
12/25/2005 18:00	54.7	189.3	5	110.7	529.7	17.7	2	126
12/25/2005 19:00	59.7	23.1	5	112.1	388.5	43.8	2	127.3
12/25/2005 20:00	62.8	27.1	5	110.6	1162.5	53.4	1.9	128.1
12/25/2005 21:00	50	98.4	5	109.8	256.6	24.7	1.8	128.1
12/25/2005 22:00	51.9	104.1	5	110	276.8	14.8	1.6	118.4
12/25/2005 23:00	53.1	73.4	5	110	247.4	89.4	1.6	118.6
12/26/2005 0:00	55.6	66.5	5	110	120.8	144.5	1.7	122.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/26/2005 1:00	54.5	140.7	5	110	110.9	103.3	1.7	122.8
12/26/2005 2:00	54.1	160.3	5	110.1	185.3	98.7	1.7	122.8
12/26/2005 3:00	52.9	194.5	5	110	147.4	54.7	1.7	122.7
12/26/2005 4:00	56.1	235.6	5	111.9	136.9	81.6	1.6	120.7
12/26/2005 5:00	56.8	375.9	3.8	114.7	101.2	198.4	1	121.9
12/26/2005 6:00	58.9	305.4	0.6	112.8	86.7	338.1	0	124.1
12/26/2005 7:00	52	303.4	2.5	109.4	191.7	194.2	0	115
12/26/2005 8:00	57.8	238.2	2.9	114.8	73.4	517.1	0.8	115.5
12/26/2005 9:00	56.7	123.9	3.5	114.8	81.4	415.5	1.8	132.4
12/26/2005 10:00	57.2	81.6	3.5	115.1	505.9	57.2	1.9	131.6
12/26/2005 11:00	55.1	78.9	3.5	115.1	110.6	28.6	1.9	131.2
12/26/2005 12:00	54.4	86.5	3.5	114.9	414.9	7	1.9	101.8
12/26/2005 13:00	54	63	3.5	115.1	66.7	165.4	1.9	90.2
12/26/2005 14:00	51.1	56	3.5	114.9	70	353.7	1.9	129.5
12/26/2005 15:00	50.7	52.7	3.5	115	100.1	24.7	1.9	131.3
12/26/2005 16:00	50.7	66.3	3.4	114.9	116.7	19.8	1.6	131.2
12/26/2005 17:00	52.7	115	3	115.1	409.9	66.7	0.9	131.2
12/26/2005 18:00	52.4	104.3	2.8	115	669.6	99.1	0.7	129.9
12/26/2005 19:00	53.3	164.5	2.7	114.9	220.9	98.4	0.7	116.6
12/26/2005 20:00	55.7	210.3	2.9	114.9	91.5	416.7	1.2	127.1
12/26/2005 21:00	54.1	117.1	3	114.9	154.8	122.8	1.6	126.4
12/26/2005 22:00	54.6	98.3	3	115.1	79.4	133.5	0.9	127.4
12/26/2005 23:00	55	73.4	2.9	115.1	91	119.5	0.9	131
12/27/2005 0:00	54.7	132.8	3.2	115	100.1	46.5	0.9	128.8
12/27/2005 1:00	54	97.9	3.4	115.5	84.4	99.7	0.8	127
12/27/2005 2:00	53.9	90.9	3.5	115	130.3	74.6	0.9	125.3
12/27/2005 3:00	54.7	112.1	3.5	114.9	91.3	137.8	1.1	124.8
12/27/2005 4:00	53.7	124.6	3.5	115.1	117.1	139.2	1.3	126
12/27/2005 5:00	53.5	65.3	3.6	115.1	107.6	101.8	1.3	126.8
12/27/2005 6:00	54.7	118.1	3.8	114.8	210	214.8	1.3	130.2
12/27/2005 7:00	51.5	161.8	3.8	106.9	156.8	140.2	1.3	128
12/27/2005 8:00	51.1	257.3	4.2	105	118.2	71.9	1.3	126.2
12/27/2005 9:00	51.2	391.6	4.2	105.1	87.2	157	1.3	126
12/27/2005 10:00	54	526.5	4.2	109.1	88.9	134.6	1.3	125.7
12/27/2005 11:00	56.8	518.9	4.2	112.8	77.2	191	1.8	125.9
12/27/2005 12:00	60.9	364.8	4.2	118.6	90.7	14	1.7	123.7
12/27/2005 13:00	57.3	78.9	3.1	116.1	90.1	23.9	1.3	115.7
12/27/2005 14:00	55	121	2	112.1	80.3	209.6	1	116.3
12/27/2005 15:00	56.4	248.1	2	112.4	75.2	173	1	118.6
12/27/2005 16:00	55.8	413.3	2.3	112.4	76.4	256.2	1	118.7
12/27/2005 17:00	64	161.4	4.6	118.3	77.3	177.7	1.2	118.7
12/27/2005 18:00	60.6	39.5	3.2	117.8	74	112.8	1.3	118.7
12/27/2005 19:00	190.1	182.7	3.3	117	77.3	107.2	1.3	118.7
12/27/2005 20:00	176	92.9	4	117.3	73.3	59.9	1.3	118.6
12/27/2005 21:00	61.7	86.7	4	117.5	73.5	52.4	1.3	118.6
12/27/2005 22:00	141.3	46.9	3.2	117.6	72.4	65.7	1.3	118.6
12/27/2005 23:00	993	177.7	0.5	97.4	71.7	95.7	1.3	118.7
12/28/2005 0:00	374.8	199.6	3.2	89.6	71.1	112.9	1.3	118.7
12/28/2005 1:00	48.4	198.9	4.8	95	71.7	57.5	1.3	117.6
12/28/2005 2:00	45	71.5	3.6	90.7	70.4	147.8	1.3	119.4
12/28/2005 3:00	44.8	321.4	3.3	94.9	78.1	161.3	1.3	125
12/28/2005 4:00	45.9	163.4	4.8	99.8	76.9	60	1	120.8
12/28/2005 5:00	48.2	146.6	3.9	100	74.9	52.7	1	119.7
12/28/2005 6:00	49.2	257.8	4.7	104	73.9	42.4	1	119.7
12/28/2005 7:00	55.7	359.1	4.4	117	71.2	61.8	0.8	117.7
12/28/2005 8:00	63.5	33.7	5	117.5	72.2	207.8	0.8	119.2
12/28/2005 9:00	64.7	8.5	4.7	119	83.6	213.6	0.8	129.5
12/28/2005 10:00	57.5	17.7	3.8	118.8	82.4	70.7	0.8	120.9
12/28/2005 11:00	53	37.3	3	118.8	104.7	190.7	0.8	126.1
12/28/2005 12:00	50.7	76.3	3	118.4	112.4	135.9	1.2	126.7
12/28/2005 13:00	57.2	111.4	3	119	103.6	111.1	1.2	112.7
12/28/2005 14:00	57.1	274.6	3	118.8	81.7	255.6	1.2	128.2
12/28/2005 15:00	58.9	370.4	3.6	119.2	89.6	135.1	1.2	136.6
12/28/2005 16:00	51.8	63.3	4.4	118.8	155.6	108.4	1.1	126.9
12/28/2005 17:00	52.6	115.9	2.6	118.6	82.2	190.5	1.2	137.5
12/28/2005 18:00	52.6	113.1	2.7	118.4	226.2	39.8	1	134
12/28/2005 19:00	51.8	63	2.6	117.1	192.5	59.2	0.8	133.3
12/28/2005 20:00	47.5	49.8	2.6	111.4	192.1	69.9	0.6	123.7
12/28/2005 21:00	49.8	131.9	2.5	113.7	113.7	176.8	0.5	126.6
12/28/2005 22:00	49.8	71.5	2.5	115.3	379.7	150.5	0.5	126.8
12/28/2005 23:00	49	63.2	2.2	112.4	75.4	83.1	0.5	128.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/29/2005 0:00	50.9	168.4	2	111.8	90.7	98.8	0.5	128.8
12/29/2005 1:00	55.8	254.8	2.4	115.8	77.7	350	1.4	129.5
12/29/2005 2:00	59	213.3	2.5	119.3	81.9	158.5	1.5	132.9
12/29/2005 3:00	59.7	149.2	2.5	119.4	151.3	60.8	1.2	133.8
12/29/2005 4:00	58.4	73	2.5	119.3	181.9	64.1	0.8	133.4
12/29/2005 5:00	57	65.2	2.4	119.1	111.8	30.3	0.7	128.7
12/29/2005 6:00	55.2	83.6	1.5	116.3	169.1	36	0.5	125.2
12/29/2005 7:00	55.4	110.8	1.5	116.3	74.4	95.8	0.5	124.9
12/29/2005 8:00	56.4	170.7	1.5	116.1	90	56.6	0.5	125.2
12/29/2005 9:00	155.5	105.4	1.5	116	85.4	88.2	0.5	125
12/29/2005 10:00	55.3	125.8	1.5	115.8	77.6	76.3	0.5	125
12/29/2005 11:00	57.2	171.9	2	116.1	83.2	58.7	0.5	124.3
12/29/2005 12:00	53.9	144.2	0.4	36	513.1	82.4	0.5	120.2
12/29/2005 13:00	12	1.1	0	0	108.7	235.4	0.5	122.7
12/29/2005 14:00	1.7	0.4	0	0	69.3	309.7	0.5	132.3
12/29/2005 15:00	1.6	0.9	0	0	83.9	93.9	0.5	127.2
12/29/2005 16:00	0.3	1.6	0	0	81.3	146.3	0.5	126.9
12/29/2005 17:00	0.3	1.4	0	0	116.2	84.8	0.5	125.9
12/29/2005 18:00	0.1	1.4	0	0	75.6	198.3	0.6	129.1
12/29/2005 19:00	0.3	1.2	0	0.1	331.8	146.4	0.7	130.6
12/29/2005 20:00	0.2	1.3	0	0.2	191.5	75.8	0.8	132.2
12/29/2005 21:00	1.2	1.2	0	0	240.7	25.9	0.7	130.2
12/29/2005 22:00	20.8	1.1	0	0	205.9	55.8	0.6	128
12/29/2005 23:00	276.4	2.6	0	0	250.9	98.5	0.7	124.1
12/30/2005 0:00	86.1	4.6	0	0	118.8	231	1.4	136.5
12/30/2005 1:00	27.4	7.5	0	0.5	579.1	31.3	1.4	133.7
12/30/2005 2:00	0	9.5	0	0.9	157.4	30.9	1	128.6
12/30/2005 3:00	0	12.2	0	1.4	125.8	134.3	1.2	132.4
12/30/2005 4:00	186.7	37.3	0.8	41.9	533.5	57.8	1.5	128.1
12/30/2005 5:00	153.5	80.6	1	62.8	362.9	70.2	1.5	138.2
12/30/2005 6:00	32.2	166	1.2	69.4	225.4	12.3	1.5	136.3
12/30/2005 7:00	52.7	312.5	2.6	96.5	313.6	12.7	1.5	136.4
12/30/2005 8:00	67.3	282.4	4	112.9	709.4	18.4	1.5	111.6
12/30/2005 9:00	69.4	208.9	4	118.4	162.5	72.7	1.8	118.9
12/30/2005 10:00	68.6	14.7	4	119	147.8	28.3	2	126.8
12/30/2005 11:00	65.7	18.3	3.1	119.1	187.8	11.3	1.7	131.5
12/30/2005 12:00	60.9	41.6	2.5	115.5	197.7	11.8	1.5	129.2
12/30/2005 13:00	50.4	223.5	3	104.8	201.2	23.5	1.1	126
12/30/2005 14:00	57.4	347.6	3.1	114.3	127.9	35.8	1	125.3
12/30/2005 15:00	58.5	234.4	3.4	115.1	161.5	47.9	1	120.7
12/30/2005 16:00	59.8	115	4	115.3	170.3	63.5	1	118.2
12/30/2005 17:00	58.8	34.6	3.9	115.2	118	146.2	1.2	115.7
12/30/2005 18:00	56.1	148.9	3.9	115.4	123.8	44.1	1.2	115.6
12/30/2005 19:00	56.8	173.3	4.1	115.3	77.1	97.6	1	115.5
12/30/2005 20:00	58.8	148.1	4.1	118.2	81.4	88.1	1	112.8
12/30/2005 21:00	55	43.8	3.7	112.5	75.6	111.6	1	118.2
12/30/2005 22:00	46.6	191.7	4.4	108.1	74.2	54	1	107.5
12/30/2005 23:00	51.8	106.1	4.1	114	67.2	110.8	1	115
12/31/2005 0:00	51.8	113.8	4	114.2	101.3	55	1	115.5
12/31/2005 1:00	54.4	173.4	4	114.1	121.5	120.8	1.1	115.7
12/31/2005 2:00	52.8	169	4.3	114.4	81.3	185.6	1.8	115.4
12/31/2005 3:00	54.4	203.2	4.8	114.3	100.2	17.9	1.9	115.6
12/31/2005 4:00	53.9	105.7	5	114.3	72.6	70.8	1.7	115.7
12/31/2005 5:00	53.2	100.9	5	114.2	70.2	125.4	1.8	115.6
12/31/2005 6:00	54.7	142	5	114.1	127	21.7	1.8	120.9
12/31/2005 7:00	56.5	96.1	5	114.2	80.4	19.1	1	120
12/31/2005 8:00	57	71	5	114.4	85	37.4	1	115.5
12/31/2005 9:00	55.2	106.6	5	114.3	67.9	118.9	1.5	115.5
12/31/2005 10:00	52.8	252.1	5	114.2	71.2	58.3	1.5	115.5
12/31/2005 11:00	55	187.9	5	114.2	76	76	1.5	115.8
12/31/2005 12:00	56.5	133.6	5	114.2	81.1	174	1.5	121.7
12/31/2005 13:00	56.7	149.8	5	114.2	305.9	58.9	1.4	121.5
12/31/2005 14:00	56	174.4	5	114.3	179.4	51.3	1.4	119.8
12/31/2005 15:00	59.6	135.3	5	114.1	123.3	44.9	1.1	117.8
12/31/2005 16:00	60	180.2	5	114.2	165.5	54.1	1.1	115.4
12/31/2005 17:00	61.6	206.2	5	116.4	88	91.7	1.1	120.4
12/31/2005 18:00	61.2	198.7	5	117.3	91.6	69.5	1.1	120.7
12/31/2005 19:00	61.1	160.9	5	117.3	82.3	43.6	1	120.6
12/31/2005 20:00	60	107.8	5	117.3	647.7	50	0.9	115
12/31/2005 21:00	63.3	80.1	4.5	117.3	107.9	103.9	1.2	114.9
12/31/2005 22:00	61.1	193.9	4.7	117.6	72.6	77	0.9	116.7

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
12/31/2005 23:00	64.4	242.5	5	118.9	73.8	366.9	0.9	122.9
1/1/2006 0:00	65.7	148.4	4.9	119.2	208.6	254.1	1.3	124.4
1/1/2006 1:00	67.5	26	3.7	119.4	79.6	160.3	1.8	127.1
1/1/2006 2:00	60.3	116.7	3	119.3	81.8	93.4	1.5	127
1/1/2006 3:00	60.6	102.2	3	119.3	98	61.5	1.5	127
1/1/2006 4:00	62.9	111.1	3	119.3	89.8	93.8	1.5	127.1
1/1/2006 5:00	71	51.3	2.6	119.3	86	28.4	1.2	121.8
1/1/2006 6:00	61.3	126.7	2	119.3	77.3	128.1	1.2	122.7
1/1/2006 7:00	59.5	103.8	2	119.5	121.3	45.5	1.3	122.9
1/1/2006 8:00	59.9	160.5	2	118.4	114.9	198.9	1.5	121.9
1/1/2006 9:00	58.7	174.3	2.1	119.1	116.7	191.1	1.8	125.4
1/1/2006 10:00	57.4	179.5	2.2	118.8	143.7	93	2	128
1/1/2006 11:00	62.7	174.5	2.2	117.6	219.1	13.4	2	126.2
1/1/2006 12:00	61.9	200.1	2.6	114.6	196.6	22	1.6	121.6
1/1/2006 13:00	62.3	84.9	2.6	114.5	126.1	145.9	1.2	120.7
1/1/2006 14:00	57	112.2	3.7	114.4	272.7	117	1.9	128.2
1/1/2006 15:00	60.2	32.2	4	114.5	378.9	18.9	2	134.3
1/1/2006 16:00	61.1	102.5	3.4	114.5	243.4	12.2	1.2	128.2
1/1/2006 17:00	62.1	70.1	3.7	114.5	178.2	28.1	0.5	123.3
1/1/2006 18:00	59.1	93.5	3.5	114.6	109.4	52.6	0.5	118.4
1/1/2006 19:00	57.8	107.1	3.5	114.4	92.1	74.5	1	122.9
1/1/2006 20:00	62.8	96.8	3.5	115.2	156.4	30.1	1	115.8
1/1/2006 21:00	62.7	77.5	2.8	118.4	386.4	108	1.3	118.8
1/1/2006 22:00	61	65.2	3	117.4	164.1	44.6	1.3	128.3
1/1/2006 23:00	59.2	74.2	3	115.6	135.6	72.4	1	124.6
1/2/2006 0:00	59.5	114.2	3	115.7	83.3	80.9	1	120.7
1/2/2006 1:00	57.8	116	3	116.4	81.5	104.6	1	120.8
1/2/2006 2:00	59.8	117.5	3	119.3	220.4	72.6	1	121.4
1/2/2006 3:00	59.4	65.6	3	119.3	137.3	153.8	1.3	129.1
1/2/2006 4:00	57.9	112.9	3	119.3	459.2	52.6	1.1	130.2
1/2/2006 5:00	58.9	66.4	3	119.4	165.9	60.7	1	124.4
1/2/2006 6:00	59.8	58.7	3	119.3	99.3	41.4	1	115.6
1/2/2006 7:00	63.1	69.4	3	119.2	72.3	44.4	1	115.5
1/2/2006 8:00	64.4	85	3	119.3	67.9	112.6	1.5	124.9
1/2/2006 9:00	61.1	68.5	3	119.4	89.2	102.1	2	131.6
1/2/2006 10:00	57.6	15.3	3	109.3	338.1	30.8	2	134.6
1/2/2006 11:00	720.4	14.5	3	82.2	175.4	33.6	2	136.5
1/2/2006 12:00	42.5	51.4	1.4	64.3	562.4	25.5	1.3	136.4
1/2/2006 13:00	48.3	114.3	1	80.9	514.3	23.9	1	128.5
1/2/2006 14:00	47.1	127.8	1.3	90	261.5	35.8	1	122
1/2/2006 15:00	50.7	142	1.3	98.8	87.4	78.1	1.2	120.4
1/2/2006 16:00	54.3	172.4	1.6	103.2	280	85.3	1.5	133.1
1/2/2006 17:00	60.7	93.2	2.6	113.3	423.1	33.4	0.7	128
1/2/2006 18:00	60.2	69.5	2.2	107.6	217.1	73.2	0.5	118.6
1/2/2006 19:00	101.1	71.6	2.8	112	108.8	128.1	0.7	124.7
1/2/2006 20:00	62.7	17.6	2.8	108.4	493.1	35.7	0.6	118.9
1/2/2006 21:00	56	91.9	3.3	106	537.1	65.9	0.8	112.2
1/2/2006 22:00	99.6	35.9	3.5	113	77.2	280.8	1.5	123.8
1/2/2006 23:00	56.3	48.4	3.4	103.5	123.4	84.4	1.5	132.9
1/3/2006 0:00	56.7	87.1	3.8	112.3	231.6	64.4	1	128.4
1/3/2006 1:00	69.1	12.1	3.4	118.6	303.3	97.2	1.2	134.6
1/3/2006 2:00	60.2	105.8	2.2	110.1	232.8	27.1	1	130.1
1/3/2006 3:00	60.3	79.7	2.5	115.4	223.1	32.6	1	130.4
1/3/2006 4:00	59.1	41.4	2.5	111.6	352	33.6	1	130
1/3/2006 5:00	58.6	47.1	2.4	112.5	214.5	23.8	1	123.1
1/3/2006 6:00	55.6	113.3	2.3	111.4	631.4	67.9	1	122.5
1/3/2006 7:00	62.5	76.4	2.3	112.2	127.2	30.7	1	120.9
1/3/2006 8:00	57.3	115.5	2.2	110.3	86.6	29.1	1	116.3
1/3/2006 9:00	55.3	68.5	2.2	108.6	93.6	36.1	1	113.1
1/3/2006 10:00	50.1	39.5	2.2	104.5	82.3	202.6	1.2	112
1/3/2006 11:00	51.4	215.2	2.7	105.9	111	139.5	1.8	126.1
1/3/2006 12:00	65.7	104.1	3	118.5	205.5	20.1	1.6	120.4
1/3/2006 13:00	63.7	17	2.8	118.8	112.4	139.5	1.8	125.2
1/3/2006 14:00	58.6	83.8	2	118.6	193.1	86	1.6	127.8
1/3/2006 15:00	63.6	83.2	2	115.8	631	44.5	1.8	131.4
1/3/2006 16:00	721.3	112.7	2	115.5	678.9	34.3	1.4	128.3
1/3/2006 17:00	222.6	63.2	2	111.5	222.5	32	0.7	125.7
1/3/2006 18:00	58.1	106.4	2	109.2	703.7	37.9	0.6	114.8
1/3/2006 19:00	106.3	105.1	3.6	114.7	119.9	223.6	2	122
1/3/2006 20:00	67.6	48.9	2.2	113.3	275.5	36.4	1.6	124.7
1/3/2006 21:00	57.7	68.9	2.2	105.1	246.3	96.9	1.5	126.7

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/3/2006 22:00	50.7	110.1	2.3	98.2	543.1	27.5	1.4	119.9
1/3/2006 23:00	51.2	134.3	3.1	103.7	773.8	66.4	0.5	116.8
1/4/2006 0:00	566.2	90.7	3	114.8	151.9	83.5	0.5	118.1
1/4/2006 1:00	69.6	118.7	3	118.3	277.6	53.8	0.5	120.4
1/4/2006 2:00	55.6	152.3	3	112.6	217.8	55.6	0.5	115.7
1/4/2006 3:00	603.4	169.9	3	116.6	173.7	192.3	0.5	123.9
1/4/2006 4:00	60.1	47.1	2.7	112.2	473.6	57	0.5	124.9
1/4/2006 5:00	62.1	143.4	2.5	118.5	96.4	60.5	0.5	120.7
1/4/2006 6:00	119.8	48.4	2.5	119.3	88.5	45.4	0.5	117
1/4/2006 7:00	68.7	72	2.5	116.9	86	112.9	0.5	119.1
1/4/2006 8:00	112.8	128	1.4	112.7	93.5	70.6	0.3	121.1
1/4/2006 9:00	61.7	256	0	112.4	106.9	148.6	0	105.8
1/4/2006 10:00	58.6	268.2	0	112.4	51	226.1	0	101.9
1/4/2006 11:00	58.4	0	0	113.1	54.8	0	0	104.9
1/4/2006 12:00	67.2	296.5	0	115	50.8	220.3	0	96.4
1/4/2006 13:00	63.1	221.8	0	117.7	47	354.2	0	94.6
1/4/2006 14:00	63.6	201	0	117.4	50.4	268.2	0	91.6
1/4/2006 15:00	60	228.5	0	112.4	54.9	396.3	0	92.2
1/4/2006 16:00	59.4	217.5	0	112.4	68.4	789.1	0	115.9
1/4/2006 17:00	60.9	238.7	0	110.7	80.1	202.6	0	109.6
1/4/2006 18:00	54.3	265.7	0	107.4	69.4	388.2	0	111.7
1/4/2006 19:00	143.3	334.5	0.7	111.6	81.4	263.9	0.3	103.7
1/4/2006 20:00	56.6	87.1	2.7	105.1	60.9	242.3	1.7	105.1
1/4/2006 21:00	55.8	109.7	3.1	105	127.5	213.9	1.4	125.1
1/4/2006 22:00	48.9	140.6	2.3	95.1	183.4	85	0.5	117.5
1/4/2006 23:00	47.7	353	4.3	100.5	102	87.9	0.5	107.7
1/5/2006 0:00	55.2	151.9	3.3	105.5	70.4	262.5	0.9	106.1
1/5/2006 1:00	156	266.2	3.5	105	114.5	135.3	1.6	107.5
1/5/2006 2:00	152.6	210.3	3.7	104.9	150.7	161.6	1.6	109.2
1/5/2006 3:00	53.3	143.2	3.7	105.1	133.5	166.1	1.6	110
1/5/2006 4:00	52	175.8	3.7	106.6	186.3	148.8	1.6	111.4
1/5/2006 5:00	49.6	81.2	3.7	107	327.1	107.3	1.6	112.1
1/5/2006 6:00	49.5	84.7	3.1	107	72.4	185.7	1.7	108.7
1/5/2006 7:00	48.3	118.1	2.8	101.1	73.4	347.3	2	119.6
1/5/2006 8:00	50.2	220.7	3.4	101.1	89.1	124.8	2	124.7
1/5/2006 9:00	50	163.9	4.2	101.9	89.2	106.9	1.3	116.9
1/5/2006 10:00	53.2	158.4	4.7	102.1	170.2	132.7	2	119.3
1/5/2006 11:00	126.4	156.2	5.1	103.8	263.2	134.3	2	112
1/5/2006 12:00	520.1	37.5	5.1	95.8	295.6	288.6	2.1	118
1/5/2006 13:00	45.1	190.1	5.1	101.7	327.5	195.4	2.2	130.1
1/5/2006 14:00	54.1	235.5	5.1	108.3	313.7	15.2	2.1	125.9
1/5/2006 15:00	60.2	79.2	5	110.2	228.9	8.6	2	118.3
1/5/2006 16:00	449.7	74.8	4.8	110.3	81.9	69.3	1.9	115.5
1/5/2006 17:00	336.6	38.9	3.1	109.6	72.6	90.1	1.8	112.7
1/5/2006 18:00	51.6	185.6	4	107.9	116.2	68.3	1.7	110.2
1/5/2006 19:00	59.9	151.6	4.4	114.8	82.8	153.6	2.2	110.9
1/5/2006 20:00	66.7	162.1	3.5	117.3	95.7	106.4	1.5	115.2
1/5/2006 21:00	67.5	89.3	3	116.4	75	87.5	1.8	105.6
1/5/2006 22:00	152.1	71.5	2.9	108.8	74	192.9	2.1	113.1
1/5/2006 23:00	53.3	212.1	3.4	110.2	233.6	126.7	1.4	110.6
1/6/2006 0:00	62.2	226	3.7	111.3	90.9	209	1.9	112.2
1/6/2006 1:00	438.5	164.3	3.7	115.4	191.4	190.6	2	115.4
1/6/2006 2:00	138.8	112.9	3.7	115.9	158.1	147.8	2	118.2
1/6/2006 3:00	62.6	209.2	3.8	118.1	255.4	70.4	2	122.6
1/6/2006 4:00	93.7	83.2	3.5	118.6	397.4	49.1	1.6	121.9
1/6/2006 5:00	353.7	91	3	115.3	285.1	51.9	1	118
1/6/2006 6:00	63.9	151.5	3	118.6	245.4	32.1	1	115.6
1/6/2006 7:00	65.4	146.5	2.7	119.3	285.2	58.1	1	110.2
1/6/2006 8:00	61	165.6	2.6	119.3	269.4	135	1	110.3
1/6/2006 9:00	55.4	106.4	2.7	117.6	88.8	256.6	1	110.2
1/6/2006 10:00	53.9	159.7	3.6	115.3	90	236	1.9	112.2
1/6/2006 11:00	55.6	105.7	4	118.3	119.4	178	2	114.2
1/6/2006 12:00	58.5	41.2	4	115	170.5	136.5	2	112.5
1/6/2006 13:00	53.6	166.9	4.3	115.1	83.9	168.7	2	112.6
1/6/2006 14:00	63.4	70.8	4.6	115.2	84.7	127	2	115.4
1/6/2006 15:00	72.5	14.8	3.9	115	127.8	71.3	1.8	115.6
1/6/2006 16:00	54.3	117.7	2.5	108.8	115.8	96	1.2	115.5
1/6/2006 17:00	57	252.5	3.6	115.9	125.3	81.6	1.2	115.5
1/6/2006 18:00	60.3	74.9	3.3	116.4	132.4	58.8	1.2	115.5
1/6/2006 19:00	54.6	30.9	3.1	112.4	133.4	35.7	1.2	115.5
1/6/2006 20:00	54.1	65.5	3	112.4	110.9	52.9	1.2	115.5

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/6/2006 21:00	1102.2	55.7	3	107.2	73.3	23.1	1.2	110.8
1/6/2006 22:00	47.9	171.4	3.1	105.3	59.7	97.4	1.3	99.8
1/6/2006 23:00	55	110.3	3.1	105.9	70.4	120.7	1.8	119.9
1/7/2006 0:00	48	239.5	3.2	103.5	67.6	62.6	1.2	111.8
1/7/2006 1:00	56.2	257.8	3.3	108.9	65.1	224.1	1.2	115.9
1/7/2006 2:00	55.6	154.2	3.2	110.6	68.7	172.7	1.2	118.6
1/7/2006 3:00	58.7	144.2	3.3	112.4	109.1	145.1	1.3	120.9
1/7/2006 4:00	60.6	155.7	3.2	113.6	81.4	111.4	1.2	121.6
1/7/2006 5:00	54.1	100.5	3.3	108.1	74.5	79.6	1.3	109.2
1/7/2006 6:00	52.6	225.9	3.3	110.8	64.7	387.9	1.2	117.4
1/7/2006 7:00	51.5	141.9	3.3	106.5	78.7	196.8	1.2	119.7
1/7/2006 8:00	57	357.5	3.3	109.6	270.9	134.2	1.2	120.7
1/7/2006 9:00	59.4	249.4	3.3	110.5	140.9	103.1	1.2	116.6
1/7/2006 10:00	63.1	280.3	3.3	113.7	75.7	332.3	1.5	123.1
1/7/2006 11:00	163.5	128.7	3.3	101.6	124.3	89.7	2	128.5
1/7/2006 12:00	58.9	366.8	3.3	113.1	155.4	7.4	2	113.5
1/7/2006 13:00	57.6	111.6	3.2	110.4	305.9	200.8	2	130.6
1/7/2006 14:00	59.2	143.5	3.6	118	297.8	29.3	2	115
1/7/2006 15:00	61.9	31.7	3.7	116.9	82.6	26.1	2	117.8
1/7/2006 16:00	55.4	75	3.3	110	75.8	14.5	1.8	115.5
1/7/2006 17:00	55.5	126.7	3.3	111.7	74.1	63.5	1.8	115.3
1/7/2006 18:00	57.2	80.4	3.3	114.1	73	34.7	1.8	115.6
1/7/2006 19:00	53.2	63.5	3.3	105.6	72.4	28.4	1.8	115.5
1/7/2006 20:00	58.9	209	3.5	118.2	76.7	4.8	1.6	113.2
1/7/2006 21:00	64.8	71.3	3.7	119.5	70.1	118.1	1.2	115.4
1/7/2006 22:00	60.7	44.6	3.3	112.7	70.3	130.7	1.7	115.5
1/7/2006 23:00	62	198.4	3.6	117.6	73	103.4	1.8	115.5
1/8/2006 0:00	64.2	96.6	2.8	111.2	110	261.2	1.8	117.5
1/8/2006 1:00	64.5	124	2	110.8	165.2	208.4	1.8	125.9
1/8/2006 2:00	62.9	151.7	2	110.3	94.4	28.2	1.9	126
1/8/2006 3:00	63.2	203.2	2	111.9	99.1	26.5	1.5	125.9
1/8/2006 4:00	74	170.4	2	113.3	149.5	85.2	1	126
1/8/2006 5:00	67.8	116.6	2	110.8	197.4	91.5	1	124.6
1/8/2006 6:00	66.1	213.6	2.2	109.5	126.8	64.9	1	118.7
1/8/2006 7:00	76.8	411.8	3.1	117.6	91.4	98.7	1	121.8
1/8/2006 8:00	90.7	421.4	3.7	119.5	89.9	185.4	1	122.6
1/8/2006 9:00	74.8	310	4	119.1	80.9	150.3	1	124
1/8/2006 10:00	86.5	21	3.8	119.2	76.8	147	1	122.1
1/8/2006 11:00	74	54.1	2.4	118.7	72.1	195.4	1	120.7
1/8/2006 12:00	71.7	78.5	2	112.2	74.2	211.8	1	117.9
1/8/2006 13:00	1089.9	130.1	2	95.1	66.9	298.3	1.5	115.5
1/8/2006 14:00	51.8	536	3.3	97.5	71	334.8	2	115.5
1/8/2006 15:00	61.2	589.3	4.7	105.5	72.9	555.4	2.1	116.2
1/8/2006 16:00	66.9	428.2	5	108	84.8	408.9	2.1	135.7
1/8/2006 17:00	73.3	416.8	5	114.2	219.1	10.9	2.1	137.1
1/8/2006 18:00	75.5	363.3	5	118	86.5	23.3	2.1	117.5
1/8/2006 19:00	70.3	141.5	5	117.6	117.9	263.6	2	131.3
1/8/2006 20:00	101.6	7.7	4.8	113.4	109.2	56.1	1.9	135.9
1/8/2006 21:00	254	58.1	3.8	118	86.1	22.7	1.2	125.6
1/8/2006 22:00	89.7	27.1	3.7	117.3	83.7	43.8	1	121
1/8/2006 23:00	69.9	11.4	3.7	112.4	76.2	87.8	1	114.8
1/9/2006 0:00	63.5	54.5	2.3	109.6	67.3	199.9	1.4	110.4
1/9/2006 1:00	56.4	204.6	2.5	105.6	70.5	399.8	2	113
1/9/2006 2:00	63.1	250.6	3.1	110.4	87.1	229.1	2	124.7
1/9/2006 3:00	72.4	97.5	2.9	114.4	98.9	65.4	1.4	126.9
1/9/2006 4:00	66.4	130.9	1.8	110.7	98.5	104.2	1	126
1/9/2006 5:00	68.6	260.5	1.8	110.3	99.7	149.6	1	126.2
1/9/2006 6:00	131.9	195.2	1.9	113.9	302.1	131.3	1	123.3
1/9/2006 7:00	646.5	74.5	2	115.6	182	282.9	1.2	124
1/9/2006 8:00	112.3	180	2.3	118.3	292.3	141.6	1.5	126
1/9/2006 9:00	67.3	57.6	2.5	119.6	106.1	115.1	2.3	126
1/9/2006 10:00	73.2	22.3	2.5	113.8	81.2	28.8	2.5	126
1/9/2006 11:00	62.4	97.1	2.6	101.3	134	8.6	2.5	126
1/9/2006 12:00	99.7	58.7	2.8	110	204	7.9	2	120.6
1/9/2006 13:00	154.9	79.3	2.5	107.4	66.7	205.8	2	110
1/9/2006 14:00	116.4	166	3.2	108.2	164.8	168.8	3.3	112
No data Kiln down					No data Kiln down			
1/12/2006 15:00	24.5	122.6	0	30.7				
1/12/2006 16:00	257.5	131.1	1.8	49.1				
1/12/2006 17:00	199.7	90.2	1.5	68.7				

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/12/2006 18:00	305.3	84.4	1.5	73.3				
1/12/2006 19:00	326.5	147.9	1.5	83				
1/12/2006 20:00	182.2	142.7	1.5	86.3				
1/12/2006 21:00	49.8	250	1.5	91.3				
1/12/2006 22:00	63.7	320.3	1.5	107.6				
1/12/2006 23:00	203	137.3	1.5	117.3				
1/13/2006 0:00	162.6	95.7	1.5	111.5				
1/13/2006 1:00	156.8	151.2	2.2	109.3				
1/13/2006 2:00	206.6	135.6	3	109.3				
1/13/2006 3:00	232.8	114.7	3	109.9				
1/13/2006 4:00	173.9	122.5	3	110.2				
1/13/2006 5:00	109.3	152.2	3	110.3				
1/13/2006 6:00	65.3	196	3.1	113				
1/13/2006 7:00	65.4	259.2	1.9	113.8				
1/13/2006 8:00	69.7	498.3	3.6	113.9				
1/13/2006 9:00	68.8	468.4	5.2	114				
1/13/2006 10:00	71.2	477.2	2.1	114.6				
1/13/2006 11:00	70	668.4	1.3	119.3				
1/13/2006 12:00	158.8	330.8	3.6	123.8				
1/13/2006 13:00	152	352.5	4.2	124.5				
1/13/2006 14:00	156.1	412.6	4.1	124.3				
1/13/2006 15:00	180.5	402.7	4.2	125.7				
1/13/2006 16:00	214.4	328.4	4.5	128.5				
1/13/2006 17:00	152.5	284	4.7	136.4				
1/13/2006 18:00	265.2	142.5	4.8	137.7				
1/13/2006 19:00	415.9	76.5	4.6	140.5				
1/13/2006 20:00	352.2	39	3.8	136.3				
1/13/2006 21:00	260.6	67.2	3.5	134				
1/13/2006 22:00	238.1	51.1	3.5	133.7				
1/13/2006 23:00	290.1	53.9	3.5	131.2				
1/14/2006 0:00	217.2	68.6	3.5	131.2				
1/14/2006 1:00	149.3	115.2	3.6	131.1				
1/14/2006 2:00	147.3	106.6	3.6	126.2				
1/14/2006 3:00	199	44.1	3.5	123.5				
1/14/2006 4:00	64.8	82.9	3.5	124.9				
1/14/2006 5:00	113.2	192	3.5	126.7				
1/14/2006 6:00	266.5	185.2	3.9	128.3				
1/14/2006 7:00	259.9	160.4	4.3	130.6				
1/14/2006 8:00	239.6	92.4	4.3	131.4				
1/14/2006 9:00	245.4	65.8	4.1	132.5				
1/14/2006 10:00	77.6	40.9	3	133				
1/14/2006 11:00	210.6	32.2	2	99.7				
1/14/2006 12:00	43.3	204	3.3	99.8				
1/14/2006 13:00	56.6	246.9	5	122.1				
1/14/2006 14:00	166.7	167.9	5	130.8	21.1	45.9	1.2	34.8
1/14/2006 15:00	268	164.2	5	133.7	441.1	84.4	1.9	58.3
1/14/2006 16:00	257.9	84	4	132.3	46.1	102.8	2	84
1/14/2006 17:00	112.3	80.8	3.1	130.2	477.9	250.6	2.1	104.9
1/14/2006 18:00	199.7	204.4	3.2	130.4	71.7	344.9	2.4	117
1/14/2006 19:00	173.8	209.5	3.8	131.9	83.7	306.7	2.5	125.6
1/14/2006 20:00	267	126.1	3.8	132.1	125.4	270.4	2.5	132.8
1/14/2006 21:00	64.5	107	3.8	132	210.6	185.3	2.5	140.5
1/14/2006 22:00	115.2	146.7	3.8	132.1	333.5	51.7	2.2	143
1/14/2006 23:00	64.6	121.1	3.8	132	223.1	17.2	2	143
1/15/2006 0:00	66.4	97.3	3.8	128.8	198.8	8.4	2	137.7
1/15/2006 1:00	277.4	118.9	3.8	120	463.3	47.9	2	121.1
1/15/2006 2:00	163.5	51.7	2.9	126.9	78	45	1.9	126
1/15/2006 3:00	61.6	72.5	2.7	128.3	71.4	50.3	1.7	115.5
1/15/2006 4:00	56.3	124.4	2.8	129.6	75	254.4	2.3	121.2
1/15/2006 5:00	59	111.6	2.8	130	81.9	284.9	2.5	124.1
1/15/2006 6:00	62.7	49.3	2.9	130.2	75.2	359.8	2.6	124.2
1/15/2006 7:00	180.5	90.6	2.9	128.7	72.4	270.5	2.6	123.8
1/15/2006 8:00	163.2	161.4	2.9	120.9	561.3	231.3	2.8	125.5
1/15/2006 9:00	53.2	203.4	3.3	129	84.3	43.4	2.7	132.7
1/15/2006 10:00	64.2	76	3.4	132.3	88.8	4.6	2.8	132.3
1/15/2006 11:00	65.5	16	3.4	129.8	177.7	5	2.3	119.7
1/15/2006 12:00	64.7	21.5	2.9	123.2	68.5	180.4	2.6	122.3
1/15/2006 13:00	58.5	94.2	2.8	121.5	78.7	65	2.3	127.1
1/15/2006 14:00	60.2	153.4	3.5	123.3	92.4	14.3	1.8	124.5
1/15/2006 15:00	63.2	132.1	3.7	123.5	73.6	27.6	1.7	120
1/15/2006 16:00	97.6	114.3	3.8	123.7	80.1	80.7	1.7	119.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/15/2006 17:00	65.8	164.8	3.7	125.6	82	118.7	1.7	119.8
1/15/2006 18:00	107	234.1	3.8	128.4	83.4	154.4	2.2	123.9
1/15/2006 19:00	291.1	292.2	4.1	126.5	68.4	136.1	1.8	124
1/15/2006 20:00	367.4	105	4.5	117.7	288	77.5	1.8	118.2
1/15/2006 21:00	511.6	48.5	4.1	113.2	79.7	272.8	2.9	116.4
1/15/2006 22:00	52.2	17.7	2.9	106.2	116.6	215.3	2.9	106.5
1/15/2006 23:00	43.7	37.3	2.5	101.3	61	377.8	2.7	104.5
1/16/2006 0:00	93.5	100.9	2.5	100.6	59.2	189.3	2.6	103.2
1/16/2006 1:00	213.8	124.7	2.6	100.6	57.7	59.4	1.8	100.7
1/16/2006 2:00	43.6	63.4	2.6	100.7	56.1	160.1	1.6	100
1/16/2006 3:00	41.5	83.5	2.6	95.7	52	217.1	2.1	95
1/16/2006 4:00	38.9	151.5	2.7	95	50.5	401.9	2.5	98.4
1/16/2006 5:00	38.6	173.8	2.9	95.8	52.3	428.1	2.5	99.7
1/16/2006 6:00	184.6	214.6	3.3	97.3	53.3	488	2.5	99.7
1/16/2006 7:00	170.2	279.6	3.6	98.3	62.6	369.7	2.5	100.2
1/16/2006 8:00	89	189.2	4	102.8	69.4	258.7	2.6	105
1/16/2006 9:00	52.7	219.6	4	100.7	45.8	334.6	2.6	100.3
1/16/2006 10:00	43.2	65.7	4	100.7	52	61.4	2.3	99.9
1/16/2006 11:00	49	3.9	4	100.8	54.3	414.1	2.5	99.8
1/16/2006 12:00	50.9	3.7	4.5	100.6	55.6	521.4	2.7	99.7
1/16/2006 13:00	53.1	3.8	4.8	100.7	56.5	536.6	2.7	99.8
1/16/2006 14:00	48.9	3.4	4.8	100.8	56.3	491.5	2.7	99.8
1/16/2006 15:00	39.5	14.6	2.6	100.8	55.6	368.7	3.2	99.6
1/16/2006 16:00	37.7	151.8	2.3	100.7	55.6	123.4	3.5	99.6
1/16/2006 17:00	39.2	226.5	2.1	99.2	54.9	141	3.4	99.9
1/16/2006 18:00	36.7	248.3	2.3	90	53.7	824.2	3.5	99.6
1/16/2006 19:00	40	374	4.2	105.8	55.7	626.8	3.3	99.7
1/16/2006 20:00	47.4	365.4	5	115	54.3	321.4	3.5	99.5
1/16/2006 21:00	118.5	377	5	116.2	55	309.7	3.5	100.5
1/16/2006 22:00	56.4	289.8	5	120.2	58.2	229.5	3.5	106.7
1/16/2006 23:00	60.7	332.1	5	124.9	74.2	160.2	3.4	115.1
1/17/2006 0:00	62.2	213	5	125.4	115.4	124.7	3.4	119.6
1/17/2006 1:00	59.7	102.2	4.8	128.2	82.3	90.8	3.2	120.5
1/17/2006 2:00	59.6	55.6	3.4	126.3	77.1	104.1	3	120.7
1/17/2006 3:00	60.6	52.8	3	127.6	75.1	73.7	3	120.7
1/17/2006 4:00	62.2	44.7	3	128.1	76.5	32.1	3	120.7
1/17/2006 5:00	61.6	60.6	2.5	129.3	75.4	40.1	2.4	120.8
1/17/2006 6:00	58.7	60.1	2	129.9	63.6	18.4	2	120.6
1/17/2006 7:00	62.3	116.2	2	129.9	144.5	78.2	1.5	120.6
1/17/2006 8:00	66.1	108.1	2	130	237.1	187.8	2.8	120.7
1/17/2006 9:00	56.6	76	2	126.2	117.8	87.4	3	121.9
1/17/2006 10:00	52.2	156	2.7	125	196	19.7	2.2	126.3
1/17/2006 11:00	54.8	124.2	4	127.3	1113.2	32.2	1.8	126.6
1/17/2006 12:00	55.1	88.8	4	128.5	85.9	22.4	1.8	97.8
1/17/2006 13:00	55.9	71.4	3.8	128	50.1	293.6	1.9	113.8
1/17/2006 14:00	56.9	122	3.5	128.2	67.1	134.6	1.6	126.1
1/17/2006 15:00	54.4	97.9	3.5	128	59.1	32	1	119.1
1/17/2006 16:00	55.7	232.4	4.1	132.2	61.2	195.5	2.3	124.3
1/17/2006 17:00	66.2	231.9	5	135	727.9	32.1	2	124
1/17/2006 18:00	147	265.3	5	138.4	635.2	80.1	2	109.3
1/17/2006 19:00	127.6	385.1	5	139.7	127.5	210.6	2.9	113.8
1/17/2006 20:00	191	231.6	5	139.9	96.3	84.5	3	124.4
1/17/2006 21:00	124.1	157.3	5	140.3	147.7	13.2	3	121
1/17/2006 22:00	114.7	23.3	5	140	67.7	186.4	3	123.7
1/17/2006 23:00	71.3	119.7	4.2	140	65.5	193.5	3	125.4
1/18/2006 0:00	61.4	206.1	4.5	140.2	68.4	155.8	3.2	125.4
1/18/2006 1:00	59.4	228.6	4.8	142	69	153	3.2	127.1
1/18/2006 2:00	61	174.9	4.9	142	70.1	124.1	3.2	128.3
1/18/2006 3:00	65.8	175	4.9	142	77.4	122.2	3.2	129.2
1/18/2006 4:00	61.5	229.5	4.9	142.3	75.8	140.7	3.2	129.3
1/18/2006 5:00	106.5	233.5	4.9	142.9	119.7	99	2.3	130.2
1/18/2006 6:00	61.8	201.2	5	143.5	71.4	118.8	1.5	131.1
1/18/2006 7:00	62.5	181.9	5	144	70.3	110.9	2.2	131.9
1/18/2006 8:00	61.3	191.7	5	144	70.7	53.7	2.3	132.2
1/18/2006 9:00	60.7	179.1	5	144	78.8	42	2.2	132
1/18/2006 10:00	59.2	192	5	144.1	86.2	65.7	2.3	132.1
1/18/2006 11:00	59.1	175.9	5	144	116.9	62.9	2.1	131.9
1/18/2006 12:00	60.3	124.9	5	143.9	87.6	68	2	132.1
1/18/2006 13:00	65.5	109.6	5	144	124.2	138.8	1.9	132.6
1/18/2006 14:00	70.9	125.6	5	144.1	105	121.2	2	135.3
1/18/2006 15:00	124.9	168	5	143.9	87	30.8	2	138.1

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/18/2006 16:00	64.6	155.5	5	144	114.2	9.1	2	133.3
1/18/2006 17:00	66.5	137.1	5	144.1	161.6	23.4	2	135.1
1/18/2006 18:00	102	180.1	5	144	217.3	20.6	2	135.8
1/18/2006 19:00	142.8	245.8	5	144	111.8	48.9	2	136.8
1/18/2006 20:00	160	234.1	5	143.9	195.5	12.1	1.9	137.7
1/18/2006 21:00	110.7	230.6	5	144.1	754.6	20.1	1.9	136.3
1/18/2006 22:00	147.6	215.7	4.9	143.9	987.3	20.6	1.9	129.9
1/18/2006 23:00	121.9	161.4	5	140.9	67.1	25.1	1.9	123.7
1/19/2006 0:00	61.6	135.1	5	140.2	61	140.5	2.1	123.3
1/19/2006 1:00	63.5	172.2	5	141.2	62	140.9	2.3	123.5
1/19/2006 2:00	64.7	135.5	5	141.9	61.5	219	2.5	123.7
1/19/2006 3:00	139.9	77.8	4.8	140.4	63.2	216.5	2.7	125.5
1/19/2006 4:00	56.4	113.3	4.5	140.1	69	264	3.2	128.2
1/19/2006 5:00	55.7	125.8	4.2	140	65.5	272.9	3.4	130.8
1/19/2006 6:00	58.2	105.2	3.8	139.9	63.2	182.9	3.1	132.7
1/19/2006 7:00	97	153.3	3.1	140.1	63.9	257.3	3.3	133.6
1/19/2006 8:00	56.8	196.5	3.6	140	66.6	393.5	3.4	136.8
1/19/2006 9:00	58.6	154.1	4.5	140	70.6	404.6	3.4	137.4
1/19/2006 10:00	56	132.8	4.7	139.9	70.4	393.4	3.4	137.8
1/19/2006 11:00	58.9	124.3	4.8	139.9	73.5	267	3.4	138.7
1/19/2006 12:00	56.9	86.4	4.8	140.1	144.3	260	3.4	139.4
1/19/2006 13:00	58.5	63.9	4.7	140.1	71.3	72.3	3.4	139.7
1/19/2006 14:00	59	78.1	4.7	140	69.9	18.5	2.7	139.6
1/19/2006 15:00	59.6	113.7	4.7	140	68.7	108.8	1.8	139.8
1/19/2006 16:00	60.7	106.4	4.8	140	257.1	124.9	2	139.5
1/19/2006 17:00	223.2	182.2	4.8	139.9	117.2	197	3.1	139.7
1/19/2006 18:00	109.3	235.1	5	140.1	71.4	117.8	3.5	139.7
1/19/2006 19:00	97.3	208.1	5	140	115.4	43.4	2.2	139.7
1/19/2006 20:00	246.3	125.3	5	139.9	71	169.1	1.5	139.5
1/19/2006 21:00	54.1	75	5	140.1	246.6	53.1	1	136.5
1/19/2006 22:00	146.8	85.1	5	139.8	62.4	115.2	0.7	120.6
1/19/2006 23:00	146.1	111.1	5	140.1	181.8	148.1	3.1	132.3
1/20/2006 0:00	114.1	237.7	5	141.5	106.8	68.9	0.5	133
1/20/2006 1:00	102.8	210.5	5	144.4	109.4	108.1	0.5	132.9
1/20/2006 2:00	112.3	143.4	4.7	143.6	66.7	108.5	1	130.3
1/20/2006 3:00	60.4	150.9	4.6	140.1	153	140.4	1.3	124
1/20/2006 4:00	71	211.8	5	140.5	364.8	237.6	3.3	130.3
1/20/2006 5:00	146.7	211.5	4.9	142.5	476.9	102.8	2.9	125.8
1/20/2006 6:00	142.5	143.4	3.8	139.7	75.5	184.9	3.4	129.1
1/20/2006 7:00	97.4	101.7	4.2	139.7	74.9	265.5	3.4	131.3
1/20/2006 8:00	61.4	57.3	4.2	138.5	76.5	277.3	3.4	133
1/20/2006 9:00	108.3	29.8	4.3	141.3	76	327.2	3.4	133
1/20/2006 10:00	159.9	37	4.3	140.6	76.1	311.2	3.4	133
1/20/2006 11:00	209.9	62	4.3	140.4	141.3	156.3	3.5	133
1/20/2006 12:00	173.5	62.3	4.3	140.3	296.9	118.8	3.5	135.9
1/20/2006 13:00	114.8	54.5	4.3	138.1	384.2	135	3.5	139.8
1/20/2006 14:00	73.5	28.3	4.3	138.6	405.5	25.9	3.5	140.1
1/20/2006 15:00	120.6	30.2	4.2	139.9	225.3	7	3.5	140.3
1/20/2006 16:00	76.5	44.6	4	140.8	127.4	9.2	2.8	140.1
1/20/2006 17:00	78.4	172.7	3.9	141.4	129	66.3	1.1	140.1
1/20/2006 18:00	67.7	120.6	4.1	140.6	94	56.2	1	138.9
1/20/2006 19:00	150	78.8	4.1	140	78.2	38.1	1	130.4
1/20/2006 20:00	239.6	76.6	4	140.6	247.1	157.7	1.6	130.7
1/20/2006 21:00	278.2	62.8	3.8	140.1	432.5	195.3	3	134.5
1/20/2006 22:00	229.5	91.8	3.8	140	356.8	264.1	3.3	136.2
1/20/2006 23:00	227.3	67.7	3.6	140	257.9	245.7	3.5	138
1/21/2006 0:00	207.1	77.5	2.2	138.9	246.8	183.2	3.5	138.2
1/21/2006 1:00	73.5	102.6	2.3	133.4	714.8	69.2	3.1	138.3
1/21/2006 2:00	64.1	151.8	2.5	131.7	89.7	96	1.3	135.3
1/21/2006 3:00	155.5	130.1	4.2	130.1	78.2	153.7	2	130.1
1/21/2006 4:00	66.8	169.8	4.8	130.3	86.7	162.9	3.3	131.5
1/21/2006 5:00	150.8	223	5	134.3	101.8	140.5	3.3	131.6
1/21/2006 6:00	125.9	235.6	5	137.9	197.8	165.2	3	132.5
1/21/2006 7:00	197.2	239	5.1	138.3	124.7	92.9	2.7	133.4
1/21/2006 8:00	107.2	267.3	5	143.5	101.2	86.1	2.5	132.3
1/21/2006 9:00	79.2	225.6	5.1	144	152.9	79.3	1.9	130.3
1/21/2006 10:00	116.2	176.8	5.1	142.4	312.6	84.7	1	128.6
1/21/2006 11:00	76.7	188.6	5.1	142	328.6	103.5	1.8	129.1
1/21/2006 12:00	133.8	282.6	5.1	142.8	414.5	92.1	2.3	129.6
1/21/2006 13:00	222.3	315.4	5.1	144	112.9	17.4	2.2	127.8
1/21/2006 14:00	81.7	174.1	5.1	144	74.2	9.1	1.5	120

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/21/2006 15:00	127.3	29.1	5.1	144	103.5	31	1.5	118.7
1/21/2006 16:00	197.9	93.5	5.1	144	73.3	78	1.5	120.1
1/21/2006 17:00	245.3	133.9	5.1	144	131.6	125.5	1.5	120.8
1/21/2006 18:00	242	180.2	5.1	144.4	63.8	190	2.6	123.2
1/21/2006 19:00	147.6	178.8	5.1	144.9	63.3	145.3	3	126.3
1/21/2006 20:00	261.7	160.7	5.1	145	69.6	79.2	3	126.7
1/21/2006 21:00	198.5	73.9	5.1	145	474	55	3	126.9
1/21/2006 22:00	125.8	74.2	5.1	145	257.5	144.2	3.5	128.5
1/21/2006 23:00	181.8	78.3	5.1	145.1	251	87.1	3.5	129.7
1/22/2006 0:00	167.1	78.8	5.1	144.9	232.6	165.9	3.5	131.3
1/22/2006 1:00	180.5	55.5	3.6	143.3	801.4	107.6	3.2	132.4
1/22/2006 2:00	178.3	121.1	3.1	140.1	151.4	55.7	1.8	131.8
1/22/2006 3:00	159.4	125.3	3.6	140.5	72.7	33.2	1.4	124.1
1/22/2006 4:00	146.6	90	3.6	141.8	62.8	182.9	2.9	124.9
1/22/2006 5:00	224	84.7	2.2	141.9	70.4	187.3	2.9	128.9
1/22/2006 6:00	268.7	71.2	1.9	137.5	112.3	108.2	3	124.7
1/22/2006 7:00	193.9	104.1	2	134.9	84	184.6	3.2	125.4
1/22/2006 8:00	66.4	164.1	2	138	71.9	295.1	3.5	129.7
1/22/2006 9:00	148.5	75.1	2	138.1	71.4	228.7	3.5	129.6
1/22/2006 10:00	227.3	100.1	2	137.9	70.3	145.4	3.5	129.7
1/22/2006 11:00	261.3	127.7	2	137.9	75.7	76.3	3.5	129.6
1/22/2006 12:00	202.5	144	2	138.9	75.2	37.9	3.4	129.5
1/22/2006 13:00	251.1	164.6	2	140.4	74.3	59.3	2.2	129.6
1/22/2006 14:00	259.9	117.8	1.9	140.5	70.9	128.5	2	129.7
1/22/2006 15:00	158	96.5	1.4	140.4	69.4	166.5	2	129.6
1/22/2006 16:00	71.1	127.4	1	140.5	70.7	274.8	2	129.7
1/22/2006 17:00	110	121.2	1	140.5	70.6	396.2	2	129.5
1/22/2006 18:00	215.3	179.4	1	140.4	71	405.1	2	129.7
1/22/2006 19:00	351	236	1	140.5	526.3	296.1	2	124.8
1/22/2006 20:00	267.4	162.5	3.7	140.6	116.2	73.3	2	110.6
1/22/2006 21:00	252.4	67.1	4	140.4	241.4	99.2	2	110.4
1/22/2006 22:00	261.9	43	3.6	140.6	496.2	123.3	2	110.5
1/22/2006 23:00	232.9	64.2	3	140.6	120.3	125.1	2	110.3
1/23/2006 0:00	115.2	54.2	3	140.4	54	134.5	2.1	110.5
1/23/2006 1:00	179.4	63.4	1.6	132.5	53	31.2	1.8	110.4
1/23/2006 2:00	61.1	154.7	1.8	123.4	49.1	85.3	0.3	107.9
1/23/2006 3:00	167.8	191.4	3.8	134.8	46.9	128.9	0.8	105.6
1/23/2006 4:00	75.6	140.1	2.3	135.4	48.1	129	1.5	105.6
1/23/2006 5:00	112.9	181.3	2.6	139.9	48.3	181.4	2	105.7
1/23/2006 6:00	81.5	152.2	2.7	140	93.8	173.6	2.2	107.6
1/23/2006 7:00	113.6	146.2	2.6	140	58.1	159.5	2.5	110.5
1/23/2006 8:00	184.9	158.5	3.1	139.9	231.4	55.8	2.5	110.3
1/23/2006 9:00	230	192.8	4	139.9	64.2	9.6	2.3	110.4
1/23/2006 10:00	293.4	157.6	4.7	140	61.3	29.3	1.5	110.5
1/23/2006 11:00	196.9	91	5	140.1	51.3	102.6	1.4	110.8
1/23/2006 12:00	217.1	64.8	5	140	54.9	94.6	2.2	115.2
1/23/2006 13:00	215.2	71.9	5	139.9	277.8	181	2.5	117.9
1/23/2006 14:00	245.6	91.9	5	140	117.4	154.8	2.5	118.1
1/23/2006 15:00	248.7	49.7	5	140	65.8	74.3	2.5	118.2
1/23/2006 16:00	272.5	38.4	5	139.9	69.9	3.3	2.5	114.7
1/23/2006 17:00	270.9	28.4	4.9	140	67	5	2.4	111.6
1/23/2006 18:00	305.5	66	3	140.1	60.7	142.8	2.7	116.4
1/23/2006 19:00	386.3	104.4	3	143	494.9	147.4	3	120.6
1/23/2006 20:00	287.9	92.9	3	144.9	400.9	245.1	3	123.6
1/23/2006 21:00	381.5	65.9	3	145	236.8	256.6	3.3	119.5
1/23/2006 22:00	287.7	56.6	3	144.9	209	237.8	3.3	123.8
1/23/2006 23:00	334.1	55.1	2.7	145.1	318.3	255.9	3.5	126.8
1/24/2006 0:00	300	49.1	2.6	145.2	706.1	72.6	2.4	126.6
1/24/2006 1:00	207	84.4	1.1	143.5	74	162.7	2.2	126.9
1/24/2006 2:00	195.8	110.9	1.1	140	191.8	143.4	2.2	128.6
1/24/2006 3:00	287.2	98.6	1	137.8	144.9	82.9	2.2	129.4
1/24/2006 4:00	162.4	104.8	1.1	129.1	84.8	131	2	130.8
1/24/2006 5:00	112.2	114.1	2.4	139.5	76.9	133.3	2.1	130.8
1/24/2006 6:00	202.8	72.7	1.7	136.1	80	134.4	2.5	132.1
1/24/2006 7:00	230	156.5	1.4	131.3	183.7	108.5	1.5	127.6
1/24/2006 8:00	275.3	211.7	1.8	134.7	110.2	148.5	1.6	127
1/24/2006 9:00	336.1	77.6	3	134.6	194.1	94.3	2.5	130.3
1/24/2006 10:00	313.9	46.8	2.8	135.3	239.8	84.3	2.5	133.4
1/24/2006 11:00	270	34.6	2.7	135.2	908.9	21.6	2.5	134.4
1/24/2006 12:00	151.9	23.1	2.2	135.1	118.8	4.7	1.9	118.4
1/24/2006 13:00	207.6	50.6	1.7	134.4	69	68.2	1.7	116.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/24/2006 14:00	225.3	98.5	1.7	135.3	66.4	168	2.5	121.9
1/24/2006 15:00	74.2	55.6	1.7	125.2	122.2	37.5	2.5	122.9
1/24/2006 16:00	58.9	164.1	1.8	124.9	168.2	36.6	2.5	118.9
1/24/2006 17:00	605.3	186.2	2.1	125.3	637.9	63	2.5	108
1/24/2006 18:00	56	189.9	2.8	127.7	55.2	132.6	2.8	118.1
1/24/2006 19:00	150.4	138.7	3	131.6	64.2	31.5	3	120.1
1/24/2006 20:00	105	225.6	3	136	67.2	8.1	3	120.7
1/24/2006 21:00	140.7	235.3	3	139.3	72.7	19.8	2.9	124.6
1/24/2006 22:00	227.5	145.6	3	139.9	63.8	75.4	1.5	121.3
1/24/2006 23:00	259.5	103	3	140.1	533	105	1.5	111.3
1/25/2006 0:00	152.4	123.4	3	139.4	197.3	82.7	1.5	105.5
1/25/2006 1:00	78.4	121.6	3	140.5	151.7	145.8	1.5	116.3
1/25/2006 2:00	75.3	136.8	3	139	58.5	106.9	1.4	116.2
1/25/2006 3:00	69.9	158.4	3	137.8	51.7	63.2	1	115.2
1/25/2006 4:00	69.1	194.7	3.1	135.8	51.5	56.6	1.4	115.8
1/25/2006 5:00	113.4	185.3	3.7	135.1	98	134.8	2.8	122.7
1/25/2006 6:00	61.6	150.4	4	135	68.5	160.1	3.4	124.9
1/25/2006 7:00	62.5	220	4.8	135.4	600.4	228.8	3.3	124.8
1/25/2006 8:00	63.2	331	5	139	58.4	115.7	3.4	124.8
1/25/2006 9:00	64.5	288.6	5	139.9	57.1	137.9	3.5	126.2
1/25/2006 10:00	70.6	168.5	5	140.1	61.6	195.1	3.5	130.6
1/25/2006 11:00	84.6	145	5.1	139.9	80.3	109.4	3.5	133.8
1/25/2006 12:00	85.6	121.5	5.1	139.9	83.3	116.6	3.5	135.6
1/25/2006 13:00	208.7	86.8	5.1	140.1	690.7	124.1	3.5	137.1
1/25/2006 14:00	154	53.8	5.1	139.9	77.7	23.6	3.2	137.3
1/25/2006 15:00	150.6	23.8	5.1	140	65.4	18.9	2.5	137.3
1/25/2006 16:00	151.9	38.8	3.8	140.1	66.6	12.4	2.5	137.3
1/25/2006 17:00	71.2	101.2	2.6	140	65.6	33.3	1.7	137.4
1/25/2006 18:00	75.5	138.8	2.6	140.2	58.2	90.9	1	137.2
1/25/2006 19:00	63.8	226.7	2.6	141.8	92.1	57.6	1	137.7
1/25/2006 20:00	200.6	382.2	3.3	143.8	280.8	29.4	0.9	138.9
1/25/2006 21:00	142	530.7	1.3	145.1	1033.9	100.2	1	137.5
1/25/2006 22:00	75.3	385.3	1.7	144.9	171.7	34.9	1.2	135.4
1/25/2006 23:00	117.1	113.5	2.3	145.1	64.7	52.1	1.2	137.1
1/26/2006 0:00	253.5	156.6	2.2	145.1	80.5	67.9	1.2	137.4
1/26/2006 1:00	118.6	114.1	2.2	145	115.9	191.8	1.6	140.1
1/26/2006 2:00	103.7	52.5	2.2	142.1	81.3	162.4	2.9	147.9
1/26/2006 3:00	70.4	37.7	2.2	134.2	152	17.9	1.7	147.8
1/26/2006 4:00	53	146.9	2.2	135.2	115.6	25.8	1.2	135.9
1/26/2006 5:00	63	194.7	2.2	141.9	55.4	151.2	1.7	131.5
1/26/2006 6:00	68.8	161.4	2.2	142	109.7	92.7	1.4	135.4
1/26/2006 7:00	60.3	170.6	2.2	141.8	204.8	239.3	2.9	143.1
1/26/2006 8:00	62	156.9	2.1	142.1	137.1	101.6	2.1	139.1
1/26/2006 9:00	56.7	117.4	1.9	142	102.5	80.9	1.7	139.2
1/26/2006 10:00	111.4	149.1	1.5	142.1	161.3	53.8	1	139.1
1/26/2006 11:00	118.5	145.1	1.5	141.9	224.4	32	0.9	139.3
1/26/2006 12:00	102.6	44.7	1	141.9	193.4	33.3	0.5	139.2
1/26/2006 13:00	142.3	79	0.3	142.2	195.9	91.2	0.1	139.2
1/26/2006 14:00	136.3	158.6	0	142	192.6	109	0	131.6
1/26/2006 15:00	58.6	184.6	0	142.1	144.3	190.7	0	133.2
1/26/2006 16:00	60.2	200.4	0	139.8	82.5	155.1	1.4	132.5
1/26/2006 17:00	54.1	279.2	0	135.1	65.9	207	1.5	129
1/26/2006 18:00	55.7	529.8	0	138.4	127.4	348.8	3.1	132.8
1/26/2006 19:00	59	525.2	0	140.4	127.3	81.6	3.2	135.1
1/26/2006 20:00	98.3	495.5	0	144.1	105.8	261.7	3.2	139.9
1/26/2006 21:00	102.8	441.2	0	145	250.3	125.1	3.3	142.2
1/26/2006 22:00	127	411.7	0	145	739.4	59.5	3.3	143.3
1/26/2006 23:00	305.6	336.5	0	145.2	916.4	54	2.1	109.6
1/27/2006 0:00	54.7	153.8	1.1	134.3	400.8	3	3.3	77.1
1/27/2006 1:00	52.7	374.4	1.6	139.2	271.8	55.3	3.3	115
1/27/2006 2:00	142.4	351.2	1.6	147.8	111.2	111.6	2.3	136.5
1/27/2006 3:00	65.4	164.1	1.6	133.6	54.5	89.6	1	118.4
1/27/2006 4:00	58.3	362.6	1.6	137	80.1	171.1	3.2	134.7
1/27/2006 5:00	239.7	365.1	1.7	139.9	122	11.5	2	134.5
1/27/2006 6:00	353.4	280.8	1.7	140.4	135.5	10	2	119.9
1/27/2006 7:00	64.2	299.3	1.7	142.2	121.3	23.7	2	128.3
1/27/2006 8:00	68.7	233	1.7	142	117.3	62.6	2	128.2
1/27/2006 9:00	245.1	158	1.7	142	702.4	287.6	2.7	128.2
1/27/2006 10:00	112.5	166.4	1.7	142	63.7	132.6	2.7	128.2
1/27/2006 11:00	203.2	157.2	1.7	142.1	78	99.5	2	128.1
1/27/2006 12:00	145	145	1.7	142	68	163.8	2.2	129.3

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/27/2006 13:00	109.3	245	3.3	142	98.1	112.8	2.3	131.2
1/27/2006 14:00	70.1	274.8	0.3	142	84	92	2.5	133
1/27/2006 15:00	62.4	226.4	1.2	139.9	220.7	54.2	2.9	132.9
1/27/2006 16:00	60.4	81.1	1.6	134	153.6	124.1	1.5	133.1
1/27/2006 17:00	51.8	203.1	2.9	124.1	332.8	82.4	2.1	129
1/27/2006 18:00	52.8	181.5	4.7	124.2	61.4	41.8	0.8	119.5
1/27/2006 19:00	238.8	154.9	4.9	123.8	289.1	159.2	1.5	120.4
1/27/2006 20:00	162.8	65	2.2	123.9	53	75.4	1.5	121.5
1/27/2006 21:00	228.7	80.1	1.5	105.9	52.9	54.9	1.1	106.8
1/27/2006 22:00	40	191.2	3.1	118.1	57.2	185.7	3.2	123.2
1/27/2006 23:00	58.6	158.4	4.3	133.8	257.4	93.2	1.8	127.8
1/28/2006 0:00	64.6	87	4	135.1	398.9	385.3	1.7	128.4
1/28/2006 1:00	65.2	51.6	3.1	135.1	183	99.2	2.6	132
1/28/2006 2:00	108.2	41.3	3	134.9	117.7	273.9	3.1	132.5
1/28/2006 3:00	62.6	106.8	3	135.2	71.3	309.9	3.4	133.6
1/28/2006 4:00	55.9	68.1	3	134.9	66.9	331.5	3.4	134.7
1/28/2006 5:00	58.7	75.6	3	135	81.2	56	3.4	134.9
1/28/2006 6:00	153.4	81.2	3	134.8	151.2	46.6	3.4	135
1/28/2006 7:00	65.9	169.5	3	135.8	155.7	270	3.4	135.5
1/28/2006 8:00	99.6	47	3	136	119.9	127.9	3.4	135.8
1/28/2006 9:00	67.9	49.8	3	136.1	360.2	120.8	3.4	135.9
1/28/2006 10:00	66.9	48.3	3	136	987.1	156.7	3.3	135.7
1/28/2006 11:00	70.5	50.7	2.8	136	91.7	65.9	2.8	135.8
1/28/2006 12:00	67.5	167	1.9	136.1	120.4	122.2	2.6	135.9
1/28/2006 13:00	102.2	177.4	3	135.9	87.4	115.9	2	135.9
1/28/2006 14:00	66.9	168.3	3.4	137.8	197.7	153.8	1.1	135.8
1/28/2006 15:00	68.3	243.3	3.1	140.4	189.6	160.3	1	134.2
1/28/2006 16:00	70.8	240.3	3.1	141.9	79	155.3	1.1	134.1
1/28/2006 17:00	68.3	170.2	2.5	142.2	73.2	149.1	0.7	133.9
1/28/2006 18:00	131.8	187.3	2.4	138.2	177.5	155	0.4	129.3
1/28/2006 19:00	60.2	184.2	3	139.7	1293	251.1	2.6	129.5
1/28/2006 20:00	61.2	152	2.9	140	64.5	178.4	2	128.6
1/28/2006 21:00	62.2	168.2	2.3	139.9	144	194.3	2.5	130.7
1/28/2006 22:00	61.5	168.5	2.3	139.9	108.4	218.5	2.7	136.9
1/28/2006 23:00	58.7	159.6	2	139.9	101.2	253.3	3	138.6
1/29/2006 0:00	65.3	159.9	1.5	139.8	268.3	187.1	3.5	141.6
1/29/2006 1:00	105.9	172.1	1.5	139.8	139.9	108.1	3.5	141.5
1/29/2006 2:00	102	75.5	1.5	139.8	84.8	194.1	3.5	141.5
1/29/2006 3:00	56.4	71.4	1.5	139.8	121.6	130.3	3.5	142.5
1/29/2006 4:00	50.3	186.6	1.5	139.8	129.3	16.1	2.7	142.5
1/29/2006 5:00	100.7	161.2	1.5	139.8	101	11.9	2	136.1
1/29/2006 6:00	103.4	120.3	1.5	139.8	130.8	114.9	2	134.5
1/29/2006 7:00	206.9	144.8	1.5	139.8	592	63.1	1.6	135.8
1/29/2006 8:00	122.8	212.5	1.5	139.8	186.4	150.9	3	136.5
1/29/2006 9:00	56.4	448.8	1.5	139.8	120.6	161.7	3.2	139.5
1/29/2006 10:00	99.3	447.5	1.5	139.8	996	113.5	3.2	141.6
1/29/2006 11:00	59.2	484	1.5	139.8	78.5	66.7	2.6	141.4
1/29/2006 12:00	65.3	439.9	1.5	139.8	430.6	16.3	1.7	141.7
1/29/2006 13:00	115.5	340	1.5	139.8	372	30	1.4	142.1
1/29/2006 14:00	66.9	173.1	1.5	139.8	241.4	87.2	1	142.4
1/29/2006 15:00	157.8	119	1.5	139.8	223.2	125.1	1	142.7
1/29/2006 16:00	64.1	114.6	1.5	139.8	92.2	116.9	1.6	142.4
1/29/2006 17:00	60	152.6	1.5	139.8	72.1	96.3	1.4	140.6
1/29/2006 18:00	58.1	130.5	1.5	139.8	296.6	51.3	0.6	140.7
1/29/2006 19:00	57.4	100.8	1.5	139.8	402	64.5	0.5	140.7
1/29/2006 20:00	58.4	154.8	1.5	139.8	689.6	90.2	0.9	139.6
1/29/2006 21:00	58.3	194.7	1.5	139.8	66.3	49.7	0.5	129.8
1/29/2006 22:00	64	177.3	1.5	139.8	60.8	181.6	1.7	135.5
1/29/2006 23:00	60.4	202.8	1.5	139.8	83.6	155.7	2.3	140.7
1/30/2006 0:00	105.1	152.3	3.9	145	65.3	207	2.7	142.1
1/30/2006 1:00	64.5	142.3	3.9	145	111.7	60.9	2.6	142.7
1/30/2006 2:00	63.6	143.9	3.9	145	249.6	116.7	2.3	142.4
1/30/2006 3:00	62.3	150.2	3.9	145.1	67.2	155.8	2.6	142.5
1/30/2006 4:00	63.7	208.2	3.9	146.5	85.2	21.9	1.3	142.5
1/30/2006 5:00	65.8	120.8	3.9	148.9	72.9	17.9	1.3	130.5
1/30/2006 6:00	261.2	60	3.5	149	57.3	127.1	1.2	134.8
1/30/2006 7:00	142.3	119.6	3	150.6	154.2	279.5	1.6	147.8
1/30/2006 8:00	148.3	129.3	3	150.9	999.2	18.4	2	147.2
1/30/2006 9:00	178.3	102.7	3	151	495.4	28.7	1.2	117.7
1/30/2006 10:00	153	103.2	3	150.9	55.8	188.6	1.3	127.1
1/30/2006 11:00	65.7	94.6	3	150.9	61.5	265.7	2.8	130.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
1/30/2006 12:00	62.5	81.3	2.8	150.7	76.9	103.2	2.8	132.6
1/30/2006 13:00	65.5	57.1	2.7	149.7	104.9	62.9	2.5	134.6
1/30/2006 14:00	105.7	24.3	2.7	140.5	160.4	7.3	2.5	135.1
1/30/2006 15:00	61.9	88.8	2.7	142	144.2	31.4	1.8	135
1/30/2006 16:00	63.9	157.9	3	141.4	67.7	75.7	1	134.8
1/30/2006 17:00	58.7	205.1	3.6	135.6	72.6	99.8	1.2	131.3
1/30/2006 18:00	52.9	356.4	4.8	137.1	57.5	124.8	1.6	129.9
1/30/2006 19:00	62.9	340.5	5.1	143.9	70.2	215.7	3.2	139.8
1/30/2006 20:00	60.1	223.5	5	134.6	151.6	131.4	2.6	148
1/30/2006 21:00	104.6	335.7	5	131.3	241.3	35.7	1.4	132.9
1/30/2006 22:00	210.3	181.5	4.9	118.2	128.9	139.2	2.6	131
1/30/2006 23:00	175	248.4	4.8	134.8	76.1	151.7	2.6	137.1
1/31/2006 0:00	259.2	137.6	3.6	113.7	107.2	37.8	1.5	134.5
1/31/2006 1:00	47.3	448.6	3.9	123.7	88.3	38.1	1.5	130
1/31/2006 2:00	132.9	273.9	5	131.3	82.6	169.9	2.2	134.8
1/31/2006 3:00	117.7	188.6	5	135	85.9	123.5	3	147.4
1/31/2006 4:00	102.8	144.6	5	135	161.3	21.7	1.2	127.6
1/31/2006 5:00	99.8	137.9	5	136.2	57.6	202.9	2.3	128.8
1/31/2006 6:00	205.6	108.1	5	138	149.1	112.5	2.8	139.9
1/31/2006 7:00	264.1	87.5	5	140.1	789.6	46.3	1.8	136.8
1/31/2006 8:00	200.9	56.1	5	140.2	935.5	105.2	1.8	131
1/31/2006 9:00	254.4	75.3	5	140	65.8	449.5	1.8	134
1/31/2006 10:00	210.8	112.5	4.1	139.9	79.3	168.2	2.8	137.7
1/31/2006 11:00	180.3	128	3.5	139.8	130.1	78.1	2	137.8
1/31/2006 12:00	160.8	126	3.5	140	117.7	62.5	2	140
1/31/2006 13:00	123.5	110	3.3	140.1	207.3	52.3	1.4	140.1
1/31/2006 14:00	248.5	127.1	2.9	140.1	91.4	96	1	139.8
1/31/2006 15:00	190.3	124.3	2.9	139.8	284.3	120.6	1	121.9
1/31/2006 16:00	344.2	117.7	2.9	140.1	51.3	154.3	1.4	119.9
1/31/2006 17:00	184.1	90.1	2.9	140.1	67.9	88.5	1	121.5
1/31/2006 18:00	117.6	119.1	2.7	139.9	118.9	108.5	2.2	132.1
1/31/2006 19:00	136	126.5	2.8	137.6	196.7	126	2	130.2
1/31/2006 20:00	250.4	192.2	3.7	138.8	73.9	208.3	2.8	130.2
1/31/2006 21:00	66.9	151.1	2.8	138.6	413.7	165.8	3.2	131.8
1/31/2006 22:00	102.8	215.7	3.6	137.5	93.6	74.9	1.2	125.9
1/31/2006 23:00	66.6	196.5	3.7	139.8	48.9	97.1	0.5	115.2
2/1/2006 0:00	114.5	205.7	3.3	139.9	52.6	136	0.5	114.8
2/1/2006 1:00	111.9	122.4	3.2	140	74.7	211	2.2	126.2
2/1/2006 2:00	118.8	80.3	3.2	135.9	84.7	157.8	2.5	131.5
2/1/2006 3:00	113.6	199.2	3.2	134.1	132.5	189.5	2.3	115.5
2/1/2006 4:00	63.6	205.5	3.2	140	928.2	20.2	0.9	1.2
2/1/2006 5:00	184.3	111.1	3.2	140	14.8	70.2	1.1	53.5
2/1/2006 6:00	70.7	94.1	3.2	138.9	92.2	143.7	1.5	95.4
2/1/2006 7:00	141.9	46.2	3.2	130.1	51	215.3	1.5	105.6
2/1/2006 8:00	54.8	116.8	3.3	125.8	154.1	325.2	3.2	114
2/1/2006 9:00	53.8	283.1	3.6	130.6	183.5	248.4	3.4	120.6
2/1/2006 10:00	50.5	302.3	4.7	135.2	92.4	266.7	3.4	125.3
2/1/2006 11:00	61	303.7	5	137.7	266.7	134	3.5	127.6
2/1/2006 12:00	101.9	270.3	5	140.2	315.2	74.5	3.5	128.6
2/1/2006 13:00	165.4	215.5	5.1	141.3	271.3	85.5	2.2	130.1
2/1/2006 14:00	146.2	198.7	5.1	141.8	297.4	179.6	2.1	130
2/1/2006 15:00	106.1	156.9	5.1	141.9	119	197.4	2.8	131
2/1/2006 16:00	116.9	81.7	5.1	142.2	169.5	121	3	130.9
2/1/2006 17:00	227.3	53.7	5	141.9	81	212.7	3.4	133.4
2/1/2006 18:00	189.9	88.6	5	141.8	122.9	70	3.3	136.2
2/1/2006 19:00	213	52.6	5	142	142.1	14.2	3.2	137.8
2/1/2006 20:00	223.1	43.3	4.3	142.1	415.6	8.9	3.2	117.9
2/1/2006 21:00	75.1	92.1	3.6	142	55.3	86.5	3.2	112.5
2/1/2006 22:00	138.5	72.1	3.6	142	55.6	389.5	3.3	117.6
2/1/2006 23:00	103.3	31	3.6	142.2	60.1	346.9	3.3	120.6
2/2/2006 0:00	64.2	33.1	3.6	141.9	101.5	283.6	3.4	124.1
2/2/2006 1:00	64.7	39.2	3.6	141.9	831.1	130.8	3.4	126.4
2/2/2006 2:00	75.8	30.3	3.4	142.1	163.2	65.5	3.2	131.8
2/2/2006 3:00	61.4	68.6	2.2	139.7	127.3	26.6	1.9	131.4
2/2/2006 4:00	58.7	141.1	2.2	136.5	195.8	28.2	1.5	130
2/2/2006 5:00	61.6	176.8	2.7	138.7	240.1	46.8	1.5	130.1
2/2/2006 6:00	116.1	82.9	2.8	139.8	82.7	13.4	1.5	121.8
2/2/2006 7:00	66.5	51.4	2.8	138.9	58.5	79.6	1.5	122.7
2/2/2006 8:00	163.5	136.2	2.9	139.5	109.6	94.2	1.5	124.1
2/2/2006 9:00	61.7	220.3	4.5	140.6	591.3	210	2.6	124.8
2/2/2006 10:00	64.6	182.5	4.5	141.3	641.4	356.2	3	125.5

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/2/2006 11:00	109.4	129.6	4.4	143.2	67.8	407.4	3.2	127.6
2/2/2006 12:00	106	94.3	4	142.9	66.5	428.7	3.3	129.2
2/2/2006 13:00	68.3	118	3.9	143.1	67	559.2	3.5	134.3
2/2/2006 14:00	239.7	58.7	3.7	142.9	135	201.7	3.5	135
2/2/2006 15:00	166.5	71.8	3.1	143.1	242.7	48	3.4	134.9
2/2/2006 16:00	162	139	3.3	141.1	140.6	25.3	2.4	135
2/2/2006 17:00	134.2	162.7	4.8	132.3	219	33.2	2	135
2/2/2006 18:00	161.8	327.4	5.1	128.2	314.8	24.6	2	133.7
2/2/2006 19:00	243.6	171.8	5	120.7	184.5	40.7	2	125.3
2/2/2006 20:00	255.7	82.5	3.6	115.3	117.3	123.4	2.7	115.1
2/2/2006 21:00	179.4	131.5	2.2	115	63.9	148	3.1	115.1
2/2/2006 22:00	450.2	103.8	1.8	114.9	57.9	244	3.5	114.9
2/2/2006 23:00	139.4	120	1	112.2	58.6	181.4	3.3	115.1
2/3/2006 0:00	184.2	162.4	1	109	59.6	43.4	2.3	115
2/3/2006 1:00	273.3	191.9	1	110	61.3	99.9	1.6	115
2/3/2006 2:00	220.6	175.1	1.3	110	61.8	221.6	2.5	115
2/3/2006 3:00	266.7	181.8	1.4	110.1	87.3	108.9	2.5	115
2/3/2006 4:00	206.4	156.2	1.5	110.1	72.1	138.3	2.5	115
2/3/2006 5:00	95.4	196.1	1.5	110.1	103.6	167.5	2.5	115
2/3/2006 6:00	43.8	310.9	2.5	114.1	155.2	117.6	2.5	114.9
2/3/2006 7:00	45	480.8	2.9	114.9	274.6	80.5	2.5	115.1
2/3/2006 8:00	47.5	688.9	2	115.1	70.7	15.7	2.5	114.9
2/3/2006 9:00	159.9	591.7	0	37.1	211.9	4.4	2.5	86.8
2/3/2006 10:00	275.7	206.9	0	70.7	161.1	25	0.6	74.9
2/3/2006 11:00	29	262.7	0	92.6	44.1	77.2	0.5	96.8
2/3/2006 12:00	125.5	282.1	0	102.6	49.4	130.4	0.9	108.4
2/3/2006 13:00	38.9	242.2	1	109.4	54.2	58.3	1	114.9
2/3/2006 14:00	153.2	30	3.5	110	55.1	54.6	0.8	115.1
2/3/2006 15:00	124.3	6.8	3.5	110.1	57.3	84.6	0.9	114.9
2/3/2006 16:00	44.3	67.6	3.5	126	55.6	149.8	0.9	118.7
2/3/2006 17:00	383.1	54	2.5	105.2	313.4	79	0.9	120
2/3/2006 18:00	233.2	40	2.3	80.1	108.3	115.8	0.9	122.4
2/3/2006 19:00	30.7	413	2.1	109.4	158.5	69.9	0.8	123
2/3/2006 20:00	47.7	586.5	1.6	129.8	62.4	150.4	0.9	123
2/3/2006 21:00	100.5	479.3	1.3	134.8	191.8	84.1	0.8	123
2/3/2006 22:00	111.4	580	0.4	134.9	119.3	114.2	1	121.5
2/3/2006 23:00	150.5	591.9	2.4	135	101.3	205.1	2.7	120
2/4/2006 0:00	57	480.8	1.5	135.2	78.4	107.8	3.5	120
2/4/2006 1:00	51.8	319.5	1.9	135	143.8	118	3.3	121.8
2/4/2006 2:00	57.3	384.6	0.6	135.3	167.8	158.5	3.5	125.1
2/4/2006 3:00	289.3	446.9	0.9	134.8	151.9	151.2	3.5	127.6
2/4/2006 4:00	101.9	175.5	3.1	135.4	122.3	121.1	3.5	129.8
2/4/2006 5:00	102	100.9	3	135.7	176.3	86.5	3.4	132
2/4/2006 6:00	66.8	167.2	3	132.2	335.4	41.4	3.4	132.2
2/4/2006 7:00	51.8	275.2	3	130.4	171.5	7.6	3.4	130.1
2/4/2006 8:00	49.5	337.8	3	131.3	116.3	7.3	3	129.9
2/4/2006 9:00	54.9	329.7	3	133.3	90.3	47.2	2.5	130.1
2/4/2006 10:00	145.2	322.4	3	134.1	62.1	87.6	2.5	130
2/4/2006 11:00	51.8	273.2	3	133.8	74.5	114.4	2.5	129.9
2/4/2006 12:00	53.5	289.5	3	134	88.5	77.8	2.5	130
2/4/2006 13:00	55.1	318.1	3	134	85.7	170.5	2.7	130
2/4/2006 14:00	57.4	280.1	3.2	134.2	78.5	150.6	3	130
2/4/2006 15:00	168.3	201.3	1.1	73.2	72	195.8	3	129.9
2/4/2006 17:00	953.1	124.7	0.9	17.7	124.2	259.2	2.8	130
2/4/2006 18:00	36.4	370.2	1.7	72.4	70.2	228.2	2.6	129.9
2/4/2006 19:00	47.5	467.6	3	110.8	124	251.9	2.4	130
2/4/2006 20:00	157.6	419.1	3	123.4	103	316.5	2.3	130.2
2/4/2006 21:00	59.9	429.2	3	127.9	64.7	317.7	2.1	129.9
2/4/2006 22:00	60.4	444.5	3	129.8	113.3	294.3	2	130.1
2/4/2006 23:00	163.4	447.1	3	129.9	112.4	187.3	1.9	129.9
2/5/2006 0:00	189.3	411.9	3	133.4	66	48.3	1.8	129.9
2/5/2006 1:00	188.5	359.5	3	135	64.1	279.8	1.7	130
2/5/2006 2:00	239.3	337.5	3	135	371	242.7	1.6	131.5
2/5/2006 3:00	180.5	215.8	3	135	62	370.2	1.4	127.2
2/5/2006 4:00	116.5	157.2	3	135	64.2	485.9	0.3	129.3
2/5/2006 5:00	89.7	82.1	3	135.1	64.8	439.5	0.5	131.1
2/5/2006 6:00	57.4	106	3	134.5	65.5	532.7	0.7	131.2
2/5/2006 7:00	401.9	108.9	3	124.5	65.9	335.4	0.7	132
2/5/2006 8:00	285.3	65.4	3	120.7	68.9	291.6	0.7	131.7
2/5/2006 9:00	140.3	105.2	2.7	120	514.8	145.6	1.3	132
2/5/2006 10:00	115.3	92.8	1.8	120	69.9	59.9	2.5	132.1

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/5/2006 11:00	200	132.1	1.7	109	73.3	181.6	2.3	128.9
2/5/2006 12:00	95.3	136.1	3.2	107.8	111.1	168.5	2.4	130.7
2/5/2006 13:00	110.8	172.1	2.2	109.7	69.5	226.1	2.6	131.8
2/5/2006 14:00	96.1	172.4	2.4	105.4	72.7	110.9	2.8	131.6
2/5/2006 15:00	41.4	140.5	2.9	104.8	373.3	171.3	3.4	133.2
2/5/2006 16:00	42.4	135.3	3.3	104.9	78.8	40.7	3.2	132.1
2/5/2006 17:00	95.5	113.9	3.4	105	71.8	112.5	3	131.9
2/5/2006 18:00	95.4	105.3	3.4	104.8	301	143.4	2.9	132.1
2/5/2006 19:00	142.7	68.2	3.3	104.6	325.5	119	2.8	131.7
2/5/2006 20:00	398.4	142.7	3.3	83.2	56.8	35.6	2.6	115.4
2/5/2006 21:00	466.5	245	3.4	101.5	57.4	174	2.2	114.9
2/5/2006 22:00	207.7	122.4	3.5	119	61.3	429.6	2.1	115.7
2/5/2006 23:00	19.7	87.7	3.5	89.3	67.3	372.4	2.3	125.6
Kiln down annual Outage					Kiln down annual Outage			
2/12/2006 18:00	20.2	18.4	0	41.1	69.6	262.3	3.3	134.8
2/12/2006 19:00	76.7	99.5	0	47.1	101.1	279	3.3	133.4
2/12/2006 20:00	131.8	163.6	0	66.7	58	194.8	3.3	117.8
2/12/2006 21:00	32.4	248.1	0	86.7	61.4	22.5	3.3	119.6
2/12/2006 22:00	934.8	173.7	0	76.8	72.7	47.1	3.3	129
2/12/2006 23:00	39.8	158.6	1.2	89.7	73.6	221.3	3.3	134.9
2/13/2006 0:00	1243.1	62.6	1	86.7	83.7	142.9	3.3	134.9
2/13/2006 1:00	581.7	92.5	1.1	76.6	123.9	72.2	2.9	135.2
2/13/2006 2:00	36.7	262.2	3	89	88.4	106.7	2	135
2/13/2006 3:00	37.8	206.5	4.2	99.3	86.1	101.6	1.9	135
2/13/2006 4:00	43.2	206.5	4.3	109.6	81.4	128.1	1.7	135.1
2/13/2006 5:00	46.5	175.4	3.5	107.8	70.2	88.1	1.6	135
2/13/2006 6:00	233.9	64.9	2.6	88.7	115.5	97	1.4	135
2/13/2006 7:00	38.5	271.6	4.6	104.9	226.1	32.7	1.4	121.7
2/13/2006 8:00	45.2	107.9	5	110.7	56.3	224	1.6	120.5
2/13/2006 9:00	435.1	104.4	5	116.2	64	396.5	3.3	133.3
2/13/2006 10:00	342.9	215.2	5	127	70.6	257.5	3.3	135
2/13/2006 11:00	139.5	267.2	5	134.3	153.4	140.1	3.3	135
2/13/2006 12:00	220.4	227.6	4.9	134.6	68.4	311.6	3.2	135
2/13/2006 13:00	128.7	447.1	4.7	130	64.7	652.6	2.9	134.9
2/13/2006 14:00	106.7	587.4	2.7	122.9	399.6	645.4	1.7	111.6
2/13/2006 15:00	105.7	354.6	0	120.1	59.8	874.6	0	127.5
2/13/2006 16:00	197	233.9	0	120	64.7	881.1	0.1	130.9
2/13/2006 17:00	115.9	248	0	120.4	73	553.3	3.3	135
2/13/2006 18:00	44.6	458.3	3.2	122.7	69.2	374.3	3.4	135
2/13/2006 19:00	48.2	146.8	4	127.4	79.5	135.5	3.4	134.9
2/13/2006 20:00	58.4	111.3	3.9	126.2	148	48.9	3.1	135.1
2/13/2006 21:00	512.5	102.9	2.1	115.3	127.3	100.4	2.5	134.9
2/13/2006 22:00	510.1	141.6	3	115.3	105.8	112.7	2.5	134.8
2/13/2006 23:00	817.8	174.9	3.1	115.1	84.1	255.6	3.1	135
2/14/2006 0:00	42.9	371.3	4	116.6	76.5	336.7	3.4	134.8
2/14/2006 1:00	42.2	336.9	5.1	122.5	80.2	204	3	135.1
2/14/2006 2:00	47.9	273.2	5.1	128.8	79.5	157.3	2.1	135
2/14/2006 3:00	247.4	167.3	3.3	115.3	81.5	98.6	1.3	135.3
2/14/2006 4:00	289	197	4.5	113.8	118.7	129.4	1	134.4
2/14/2006 5:00	83.7	421.4	5	118.1	222.4	146.9	1	135.7
2/14/2006 6:00	43.1	480.4	5.1	126.5	211	227.4	1	134.6
2/14/2006 7:00	48	292.1	5.1	129.9	159.4	224.1	1.1	135.1
2/14/2006 8:00	47.8	169.3	5.1	129.9	129.1	140.6	1.2	135.1
2/14/2006 9:00	50.4	231.2	5.1	130.5	117	162.6	1.2	135.1
2/14/2006 10:00	572.6	248.5	5.1	134.7	78.7	206.9	2.1	134.9
2/14/2006 11:00	557.5	112.8	5.1	135	76.8	106.6	2.7	135.3
2/14/2006 12:00	58.8	161.5	5.2	135.2	83.9	83.8	2.8	134.9
2/14/2006 13:00	146.7	228.3	5.2	135.3	90.3	55.9	3.1	135
2/14/2006 14:00	53.7	324.6	5.2	138.6	154.3	120.9	3	135.1
2/14/2006 15:00	52.5	398.7	5.2	135	177.1	151	3	134.8
2/14/2006 16:00	51.8	333.4	5.1	134.6	125.8	75.8	3	134.9
2/14/2006 17:00	146.4	330.6	5.1	138.9	140	66.8	2.2	135.1
2/14/2006 18:00	171.6	405.6	5.1	139.9	79.7	93.7	2	134.7
2/14/2006 19:00	63.1	514.6	5.1	140	150.1	174.5	2	135.3
2/14/2006 20:00	63	465.2	5.1	140	77.1	233.2	2.4	134.9
2/14/2006 21:00	62.6	247.9	5.1	139.8	76.6	171.3	2.5	135.1
2/14/2006 22:00	155.8	427.5	5.1	136.6	70.1	87.5	2.5	134.9
2/14/2006 23:00	42.3	576.2	5.1	135	77.7	67.6	2.5	134.9
2/15/2006 0:00	44.8	595.1	5.1	129.1	83.9	79.1	1.7	135
2/15/2006 1:00	581	187.7	5.1	114.8	177.1	62.8	1.4	131.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/15/2006 2:00	43.1	126.9	5.1	118.5	156.7	109.2	1	135
2/15/2006 3:00	44.6	219.6	5.1	122.5	174.2	47.6	1	133.7
2/15/2006 4:00	49.6	118.4	5.1	127.3	103.8	40.7	0.8	127.4
2/15/2006 5:00	52.7	49.8	5.1	131.7	62.6	133	0.9	124
2/15/2006 6:00	102.3	65.3	5.1	135	104.4	137.6	1.9	129.1
2/15/2006 7:00	64.7	34.5	5.1	136.1	86	137.8	2.8	134
2/15/2006 8:00	57.3	19.7	5.1	136.1	77.8	73.8	2	131.4
2/15/2006 9:00	63	34.5	4.3	139.8	81	143.6	2	133.8
2/15/2006 10:00	59.4	89.8	2.5	138.8	72.9	95.1	2	132.2
2/15/2006 11:00	53.1	78.1	1.6	135	72.5	71.9	2	133.2
2/15/2006 12:00	221.2	129.1	3.1	135	71.7	26.7	1.9	133.3
2/15/2006 13:00	145.9	515.1	3.4	135	109	14.6	1.8	131
2/15/2006 14:00	54.8	648.1	3.9	135.1	65.8	31.7	1.3	115.2
2/15/2006 15:00	96.1	809.4	4.2	135.1	53.7	100.7	1.7	118.4
2/15/2006 16:00	51.3	880	4.6	137	56.9	302.3	2.6	124.4
2/15/2006 17:00	93.5	597.8	4.9	139.9	112.1	304	3.5	134.7
2/15/2006 18:00	108.9	610.9	5	140.1	75.6	203.9	3.5	136.6
2/15/2006 19:00	820.7	408.5	5	140	149.5	182.8	3.5	137
2/15/2006 20:00	58.5	228.9	5	140.3	87.6	154.9	3.5	138.7
2/15/2006 21:00	55.7	113.1	5	140.2	176.7	107.4	3.5	138.1
2/15/2006 22:00	53	147.5	5	139.7	150.5	57.9	3.5	138
2/15/2006 23:00	56.1	122	5	139.9	155.4	51.9	3.5	137.9
2/16/2006 0:00	123.6	113	5	139.7	153.2	26.5	3.4	138.1
2/16/2006 1:00	637.1	15.3	5	135.1	160.5	14.1	2.3	137
2/16/2006 2:00	64	14.1	5	134.9	124.8	13.5	2	121.3
2/16/2006 3:00	207.7	9.3	5	130.8	150.6	47.1	2.5	110
2/16/2006 4:00	52.4	54.1	4.2	133.7	72.6	195.5	3.4	129.6
2/16/2006 5:00	51.7	89.3	5	135	151.6	33.2	3.4	130.1
2/16/2006 6:00	51.1	68.8	5	133.6	116.9	30.9	3.4	130.2
2/16/2006 7:00	49.8	32.2	5	130	74	81.5	3.4	132
2/16/2006 8:00	45.5	142	5.2	130.1	76.2	41	2.7	131.9
2/16/2006 9:00	48.8	211.8	2.7	129.9	70.9	100.2	2.5	132.6
2/16/2006 10:00	50.1	99.9	2.8	129.9	71.1	307.9	2.3	133.1
2/16/2006 11:00	1219.3	97.3	1.5	112.8	74.5	316.6	2.4	134.4
2/16/2006 12:00	38.8	142.6	4	121	125.7	199.6	2.9	135
2/16/2006 13:00	151.3	302.9	5.2	136	154.9	183	2.7	135.1
2/16/2006 14:00	266.4	148.2	4.4	138.9	124.3	163.2	2.9	135.1
2/16/2006 15:00	641.9	83	1.4	117	122.4	109.9	1.3	134.9
2/16/2006 16:00	1074.9	133.4	0.4	105.3	119.4	113.6	1.9	134.9
2/16/2006 17:00	272.7	127.4	1.9	106.2	261.2	111.5	2.2	134.1
2/16/2006 18:00	33.8	196.2	4.6	117.2	292.5	113.5	3.4	134.5
2/16/2006 19:00	45.4	349.2	5.2	133.2	246.1	146.2	3.5	137.4
2/16/2006 20:00	51.8	343.5	5.2	135.2	293.4	94.4	2.2	136.9
2/16/2006 21:00	47.6	310.8	5.2	135	211	110.4	1.6	130.2
2/16/2006 22:00	792.2	137.1	4.6	133.3	323.9	47.9	0.2	12.2
2/16/2006 23:00	44.6	93.2	2.5	125.2	0	1.6	0	0
2/17/2006 0:00	46	114.5	2.5	124.5	0	2.6	0	0
2/17/2006 1:00	99.9	122.1	3.4	112.8	706.7	68	0.3	33.5
2/17/2006 2:00	40.5	239.7	5.2	127.7	729	83.9	1	71.8
2/17/2006 3:00	92.3	200.7	5.2	120	103.7	79.7	1	63.9
2/17/2006 4:00	333.5	260.2	5.2	120.5	813.8	237.9	1.5	93.8
2/17/2006 5:00	309.3	298.1	5.2	124.7	706.1	305.1	2.9	112.5
2/17/2006 6:00	371.1	305.5	5.2	129.6	194.3	225.7	3.5	129.2
2/17/2006 7:00	135.2	407.7	5.2	130.1	837.8	96.9	3.5	125.5
2/17/2006 8:00	51.4	390.2	5.2	135.4	267.1	119.8	2.8	125.2
2/17/2006 9:00	60.9	348.2	5.2	144.4	352.3	129.4	3.3	125
2/17/2006 10:00	776.4	74.1	3.3	120.1	65.5	102.3	2.7	124.9
2/17/2006 11:00	464.3	96	2.6	123.2	174.9	109.9	2.8	125.1
2/17/2006 12:00	927.7	107.2	1.1	112.9	166.4	134	3.1	125
2/17/2006 13:00	538	133.5	2.8	107.6	65.1	111.9	2.1	125.1
2/17/2006 14:00	42.5	168.5	5.2	113.4	116.6	115.6	3.1	125
2/17/2006 15:00	44.6	267	5.3	132.7	61.9	172.3	3.5	125
2/17/2006 16:00	52.7	210.4	5.3	140.4	61.7	262.8	3.6	125.5
2/17/2006 17:00	60.2	184.6	3.9	138.2	106.1	271.5	3.6	123.8
2/17/2006 18:00	52.1	102.2	2.8	113.2	55.8	298.2	3.2	120.9
2/17/2006 19:00	40.6	105.6	1.6	108.4	66.2	397.9	3.5	126.6
2/17/2006 20:00	1353	232.9	1.6	110	62.1	327.2	3.5	128
2/17/2006 21:00	41.3	490.3	1.9	116.4	107.5	254.3	3.5	131.5
2/17/2006 22:00	45.9	368.9	5.2	125.2	127.3	206.4	3.5	135
2/17/2006 23:00	49	60.4	2.7	125	107.1	97.3	2.9	130.7
2/18/2006 0:00	44.5	105.8	1	115.4	103.7	194.7	3.5	131.8

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/18/2006 1:00	43.3	118.4	1.5	117.6	76.9	222.4	3.5	134.9
2/18/2006 2:00	45.3	112.4	1.8	117.9	112.6	97.8	3.2	135
2/18/2006 3:00	43.7	120.1	2.6	115.1	80.9	109.5	3.1	135.1
2/18/2006 4:00	659.6	106.1	2.6	111.7	109.2	111.6	2.7	133.3
2/18/2006 5:00	40.4	124	3	106.6	185.7	108.8	2.1	130.1
2/18/2006 6:00	41.7	102	3.6	114.4	224.5	117.5	2.6	127.6
2/18/2006 7:00	41.8	125.1	3.4	115.9	117.2	270.3	3.5	134.6
2/18/2006 8:00	43.6	255.3	5.2	122.7	197.4	98	2.6	135
2/18/2006 9:00	720.9	130.8	4.9	121.6	80.7	113.1	2.8	134.9
2/18/2006 10:00	770.4	87.9	3.2	117.3	77.2	173.1	3.2	135
2/18/2006 11:00	254.8	102.5	2	113.6	75	108.6	2.3	135.1
2/18/2006 12:00	42.2	131.5	3.3	113.9	73.7	116.5	3.1	135
2/18/2006 13:00	41.3	110.6	4.3	115.1	75.3	105.5	2.8	135.1
2/18/2006 14:00	41.9	113.7	3.7	110.6	72	127.6	3.5	135
2/18/2006 15:00	42.7	102.6	4	111.8	74.6	114.4	3.2	135
2/18/2006 16:00	598.7	99.9	2.6	111.8	74.9	109.9	2.8	135
2/18/2006 17:00	43.4	113.1	2.3	110.1	73.3	111.1	2.7	135
2/18/2006 18:00	43.2	112	2.5	109.9	110.8	126.4	3.4	135.1
2/18/2006 19:00	37.8	110.1	2.4	110	148.2	174.9	3.5	134.9
2/18/2006 20:00	35.7	121.9	3.3	111.9	134	99.3	2.1	135
2/18/2006 21:00	40.2	115.8	4.1	115	137.3	106.5	1	134.9
2/18/2006 22:00	42.3	93.8	2.8	115	122.1	108.1	0.5	134.1
2/18/2006 23:00	41.7	101	1.6	114.5	57.9	145.1	2.1	115.7
2/19/2006 0:00	45.4	112.5	1.4	101.2	63.1	255.6	3.5	123.3
2/19/2006 1:00	40.8	132.8	3.1	104.7	97	295.3	3.5	130
2/19/2006 2:00	43.1	192	5.2	118	69.2	268.6	3.5	133.5
2/19/2006 3:00	616.2	69.9	3.7	121.9	73.2	184	3.5	135
2/19/2006 4:00	50.4	103.6	1.6	107.5	74.8	110.9	3.4	135.1
2/19/2006 5:00	36.5	137.3	3.6	104.6	73.7	163.7	3.5	135
2/19/2006 6:00	42.5	93.8	3.9	114.4	201.1	138	3.5	134.9
2/19/2006 7:00	47	102.6	2.3	121.7	75.4	125.2	3.2	135
2/19/2006 8:00	49.1	107.2	1.3	120.4	77.5	112.3	3.1	135
2/19/2006 9:00	44.7	117.5	2.1	119.9	79.7	134.7	3.5	135
2/19/2006 10:00	46	120.8	3	120	75.1	142.3	3.5	135.1
2/19/2006 11:00	586.3	110.6	3.1	119.3	72.1	164.3	3.5	135.1
2/19/2006 12:00	522.8	107.4	2.4	117.8	70.1	206.3	3.5	135
2/19/2006 13:00	46.7	107.8	3	121.7	72.9	131.4	3.5	135
2/19/2006 14:00	305.9	89.6	1.1	106.6	71.8	188.9	3.5	134.9
2/19/2006 15:00	35.2	156.4	3.6	107.9	68.9	211.5	3.5	135.1
2/19/2006 16:00	41.4	100.1	4.1	113.7	68.3	190.7	3.5	134.9
2/19/2006 17:00	228.2	98.7	3	114.3	71.5	145.8	3.5	135.2
2/19/2006 18:00	169.2	180.9	5	115.1	73	147.6	3.5	135.7
2/19/2006 19:00	42.8	276.8	5.2	116.2	77	200.8	3.5	136.7
2/19/2006 20:00	37.7	382	5.2	117.8	77.6	202.9	3.5	137.9
2/19/2006 21:00	41.8	453.9	5.2	120.7	76.6	180.7	3.5	139.2
2/19/2006 22:00	47.8	272.8	5.2	122.8	78.1	98.3	2.5	140
2/19/2006 23:00	49	75.4	4.2	119	73.7	109.6	2	140.2
2/20/2006 0:00	50.8	120.2	4.1	122.4	74.4	110.1	1.9	139.9
2/20/2006 1:00	49.6	106.5	3.6	124.8	74.7	109.3	1.7	140
2/20/2006 2:00	51.1	96.7	2.9	124.9	74.3	107.3	0.8	140
2/20/2006 3:00	49.7	100.1	1.7	121	72.8	126.8	0.6	138.7
2/20/2006 4:00	686.1	121	1.8	101.9	108.9	68.3	1	135
2/20/2006 5:00	36.2	191.2	4.8	107.7	73	80	1	135.1
2/20/2006 6:00	363.3	118.1	4.5	113.1	75	85.5	0.9	132.1
2/20/2006 7:00	43.3	134.5	4.6	114.1	68.8	121.5	2.6	130.1
2/20/2006 8:00	92	238	5.2	114.9	71.5	123.8	3.5	133.4
2/20/2006 9:00	49.8	193.7	5.2	122.6	74.4	103.8	3.2	137.5
2/20/2006 10:00	123.1	230	5.2	132.7	132	107.1	1.8	140.1
2/20/2006 11:00	106.5	127.7	4.9	144.1	145.3	107.5	0.9	137.3
2/20/2006 12:00	178.7	80.5	2.4	145	108.3	112.3	1	132.2
2/20/2006 13:00	110.3	110.5	1.9	140.4	66.3	110.8	1.2	130
2/20/2006 14:00	106.1	115.6	2.2	140.1	63.4	119.3	2.8	128.6
2/20/2006 15:00	187.4	156.1	4.8	140.2	251.6	140.4	3.6	134
2/20/2006 16:00	143.9	129.4	5.2	140.2	169.3	98	3.5	134.9
2/20/2006 17:00	54.6	209.6	5.2	140.3	110.3	105.6	3.1	134.9
2/20/2006 18:00	607.8	158.3	5.1	142.6	73.5	110.5	3.2	135.7
2/20/2006 19:00	97	138.5	5	145.9	67.4	108.3	3.1	136.2
2/20/2006 20:00	191	129.2	5.1	145.1	66.4	108.1	2.5	136
2/20/2006 21:00	58.8	109.3	4.9	144.9	63.9	104.3	1.4	135.9
2/20/2006 22:00	58.9	99.6	4.6	144.9	65.2	93.9	0.7	125.2
2/20/2006 23:00	417.8	104.8	4.1	145.2	56.4	149.4	1.2	118.6

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/21/2006 0:00	60	123.1	4.3	144.9	63.5	142.2	3.3	126.6
2/21/2006 1:00	63.5	95.3	3.7	145.2	69.7	102.1	2.4	130
2/21/2006 2:00	60.3	100.4	2.5	144.8	64.6	107.5	1.1	130
2/21/2006 3:00	67.5	101.2	1.3	134.1	64.6	108.3	0.9	128.1
2/21/2006 4:00	45.6	148.8	3.6	112.7	88.3	88.7	1.4	93.3
2/21/2006 5:00	161	100.5	4.4	123.8	63	118.9	3.1	123.9
2/21/2006 6:00	49.2	122.5	4.6	124	80.3	98.5	2	128.8
2/21/2006 7:00	128.1	108.3	4.5	124	107.5	114	1.6	125
2/21/2006 8:00	141.4	76.8	0.9	119.7	145.8	109.4	2.1	125
2/21/2006 9:00	110.9	120.9	1.3	115.6	107.2	117.6	2.6	127.5
2/21/2006 10:00	100.1	109.5	1.3	116.2	121.3	134.2	3.5	132.5
2/21/2006 11:00	51.6	119.9	1.8	116.1	147.7	115.8	3.5	134.5
2/21/2006 12:00	49.4	135.6	3.8	125.9	130.8	94.6	3.1	135
2/21/2006 13:00	61.6	119.9	5	139.7	202.4	107.6	2.2	135.1
2/21/2006 14:00	256	87.5	3.3	141.8	203.6	103.2	0.9	134.3
2/21/2006 15:00	435.7	95.7	1.9	142.1	81	120.9	1	130
2/21/2006 16:00	58.9	137.3	3.6	142.3	114.5	111.5	1.5	130.1
2/21/2006 17:00	62.6	117.4	4.8	143.6	112.6	114.3	2	122.7
2/21/2006 18:00	58.3	100	4.7	144	210.9	137.9	2.9	116.3
2/21/2006 19:00	703.3	109.1	4.6	144.2	180.9	195.6	3.6	120.8
2/21/2006 20:00	62.6	114.9	4.5	144.8	115.4	242.5	3.6	125.1
2/21/2006 21:00	60.7	119.8	5	144.9	69.3	245.6	3.5	131.6
2/21/2006 22:00	60.2	165.1	5.2	145.3	78.2	240.3	3.5	136.4
2/21/2006 23:00	57.8	86.9	4.5	144.8	129.7	89.4	3.1	138
2/22/2006 0:00	54.5	109.9	4.2	145.3	119.2	109.5	2.3	138.1
2/22/2006 1:00	57.5	113.8	4.3	145.1	76.9	108.9	2.3	137.9
2/22/2006 2:00	56.9	116.8	4.8	144.6	162.7	109.2	2.1	136.9
2/22/2006 3:00	57.7	121.7	5.2	142.2	166.2	106.3	1.4	131.9
2/22/2006 4:00	56.8	177.5	5.2	144	67.7	123	2.3	130.7
2/22/2006 5:00	59.8	146.9	5.2	144.9	113.9	107.7	3.3	134.9
2/22/2006 6:00	59.1	138.5	5.2	144.9	70.1	100.7	2.2	133.3
2/22/2006 7:00	507.9	254.4	5.2	145	283.2	135.5	2.2	113.3
2/22/2006 8:00	53.6	244.5	5.2	145.1	59.6	184.2	3.5	125.9
2/22/2006 9:00	192.1	309	5.2	144.9	483	124.9	2.6	131.9
2/22/2006 10:00	54.1	312.3	5.2	145	388.8	110	0.9	132.9
2/22/2006 11:00	56.8	348.7	5.2	146	349.3	115.1	1.9	135.6
2/22/2006 12:00	53.2	285.3	5.2	146	385.9	111	2.4	137.5
2/22/2006 13:00	61.9	185.3	5.2	146	361.7	99.7	0.7	127.9
2/22/2006 14:00	145.2	199.6	5.2	146.1	142.1	222.4	1.4	85.7
2/22/2006 15:00	96.4	225.9	5.2	146	37.4	111.9	2.9	80
2/22/2006 16:00	69.8	372.8	5.2	146.4	41.8	109	2.9	80.7
2/22/2006 17:00	64.9	387.2	5.2	147	49.5	161.8	3.5	97
2/22/2006 18:00	212.8	342.6	5.2	143.1	394	269	3.5	113
2/22/2006 19:00	403.1	269.2	5.2	149.6	155.9	299	3.5	123.2
2/22/2006 20:00	900.3	322.6	5.2	150.1	172	348.3	3.5	132.4
2/22/2006 21:00	464.3	243	5.2	150	255.7	262.5	3.5	135.6
2/22/2006 22:00	488.5	243.8	5.2	149.8	151.4	104.3	3.3	137.5
2/22/2006 23:00	197.4	285.3	5.2	150.1	201.9	107.9	2.4	138.8
2/23/2006 0:00	221.1	285.9	5.2	150	230.2	109.9	2.3	139.1
2/23/2006 1:00	291.4	184.6	5.2	150.1	347.8	107.1	1.7	139.1
2/23/2006 2:00	275.1	146.4	5.2	150.5	224.7	107.4	1.1	139
2/23/2006 3:00	538.8	189.4	5.2	150	261	108.5	0.3	139
2/23/2006 4:00	204.3	159.8	5.2	149.9	267.2	111.7	0.2	139
2/23/2006 5:00	117.1	73.2	3.3	150	119.8	110	0.5	139.1
2/23/2006 6:00	85.8	111.4	2.7	150.5	139.6	113.9	0.3	139
2/23/2006 7:00	776.2	105.3	2.8	150	169.4	116	0.8	139
2/23/2006 8:00	701.5	103.1	1.7	150	128.1	109.8	0.9	139
2/23/2006 9:00	226.1	123.4	3	149.8	243.1	102	0.7	138.1
2/23/2006 10:00	275.3	121.1	3.5	150.2	116.1	85	0.6	131.5
2/23/2006 11:00	437.4	101	3.3	150	239.8	99.9	0.8	126.9
2/23/2006 12:00	300.9	106.3	2.7	149.9	243.8	122.1	2.8	131.1
2/23/2006 13:00	193.9	102.4	2	150.1	169.9	107.4	3.1	134.6
2/23/2006 14:00	254.2	112.2	1.9	149.9	331.3	101.5	1.8	133.7
2/23/2006 15:00	221.4	113.9	2.1	150.1	330.3	78.7	0.7	92.6
2/23/2006 16:00	514.3	118.4	2.4	150	305.9	125.2	1.8	89.2
2/23/2006 17:00	595.4	87.2	0.7	131.1	203.5	169.2	3.6	107.2
2/23/2006 18:00	167.1	224.5	4.6	125.7	235.2	181.5	3.6	120.3
2/23/2006 19:00	120.8	208.6	5.2	137.1	175.7	226	3.5	132
2/23/2006 20:00	762.4	95.9	4.1	143.9	216.1	149.7	3.5	137.2
2/23/2006 21:00	126.2	106	2.1	147	253.1	119.4	3.5	139.6
2/23/2006 22:00	106.4	106.1	2	148.8	441.6	89.3	2.9	141.9

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/23/2006 23:00	986.4	108.2	1.8	149	112.2	104.2	1	142
2/24/2006 0:00	63.2	113	1.8	149	126.5	71.3	0.6	133.9
2/24/2006 1:00	60.8	104.5	1.3	149	150.3	89.4	1.7	92.2
2/24/2006 2:00	65.5	121.4	1.9	143.7	52.5	193.2	3.5	110.1
2/24/2006 3:00	62.4	139.3	4	140.2	69.8	194.4	3.5	123.1
2/24/2006 4:00	69.8	106.7	5	142.2	193.1	95.6	3.2	134.1
2/24/2006 5:00	79.7	115.1	4.8	143.5	116.6	107.6	2.1	135
2/24/2006 6:00	70	99.4	4.6	147.3	74.1	105.7	1.3	135.1
2/24/2006 7:00	121.6	116.2	4.1	141.5	66.3	101	0.7	129.9
2/24/2006 8:00	202.8	134.7	5.2	124	606.2	106	1.2	111.9
2/24/2006 9:00	95.1	90	4.9	120.2	374.4	111	1.6	84
2/24/2006 10:00	43.2	97.4	3.5	120.4	129.4	109.9	3	99.2
2/24/2006 11:00	56.3	100.2	2.2	123.1	47.1	104.5	1.9	107.7
2/24/2006 12:00	46.4	102.2	1.5	123.7	45.6	96.1	0.9	97.4
2/24/2006 13:00	46.7	109	1.1	124	45.9	113.9	1.7	96.7
2/24/2006 14:00	53.8	115.3	1.4	123.9	45.5	108.3	1.7	99.9
2/24/2006 15:00	51.7	122.3	2.3	124.9	45.3	109.4	1.4	99.7
2/24/2006 16:00	55.1	172	4.8	132.5	51.8	118.7	3.1	113
2/24/2006 17:00	54.9	266.2	5.2	141.8	65.2	102.6	2.7	132.2
2/24/2006 18:00	56.2	338.1	5.2	147.4	66.6	83.2	0.6	127.3
2/24/2006 19:00	658.4	217.5	5.2	148.1	209.7	125.3	2.5	127.5
2/24/2006 20:00	59.4	109.9	5.2	145.3	523.8	98	2.2	136.1
2/24/2006 21:00	62.1	155.2	5.2	148	395.1	86.8	0.6	132.7
2/24/2006 22:00	62.9	110.9	5.2	147.8	177.5	106	0.9	122.9
2/24/2006 23:00	69.3	181.8	5.2	147.9	203.2	115.4	3	124.8
2/25/2006 0:00	62	155	5.2	148.1	124.4	113.6	2.8	125.5
2/25/2006 1:00	64.6	81.3	4.7	148	213.3	143.1	3.5	133.2
2/25/2006 2:00	66.6	107.6	4	147.9	211.1	89.9	2.9	125.9
2/25/2006 3:00	66	102.3	3.2	148.1	570.7	28.1	3.5	12.1
2/25/2006 4:00	67.1	116.7	3.6	148	0	1.2	3.2	0
2/25/2006 5:00	66.6	111.4	3.6	148	0	0.6	0	0
2/25/2006 6:00	64.5	111.3	3.6	148.1	0	0.5	0	0
2/25/2006 7:00	406.8	134.5	4.6	147.8	0	0.4	0	0
2/25/2006 8:00	231.2	80.3	3.2	148.1	0	0.3	0	0
2/25/2006 9:00	154.4	116.2	3.7	147.9	0	1.6	0	0
2/25/2006 10:00	66.7	89.5	1.9	148.1	0	4.2	0	0
2/25/2006 11:00	105.8	126.8	2.6	148	0	7.6	0	0
2/25/2006 12:00	63.6	119.4	3.7	148	363.6	49.6	0.7	49.8
2/25/2006 13:00	61.5	114.9	4	148.1	440.9	91.7	0.6	73.7
2/25/2006 14:00	59.1	117.8	4.9	148.2	44.1	184.7	1.6	78.8
2/25/2006 15:00	63.7	109.9	4.8	147.9	220	134.7	3.5	100.1
2/25/2006 16:00	139.9	97.8	3.9	148	86.9	98.4	3.2	127.9
2/25/2006 17:00	65.8	103.9	3	148	73.6	98.7	1.1	133.9
2/25/2006 18:00	64.2	111.1	2.8	142.6	60.4	100.4	1.5	117.1
2/25/2006 19:00	60.9	121.3	4	144.3	73.9	105.4	1.7	129.2
2/25/2006 20:00	118.8	98.4	3	147.2	67.7	104.2	0.7	125.3
2/25/2006 21:00	115.3	104.9	2.2	148.1	69.5	110.7	0.9	125
2/25/2006 22:00	75.8	113.6	2.2	148	68.8	111.2	1	125
2/25/2006 23:00	69.1	103.7	1.9	148.1	67.3	111.1	1	121.3
2/26/2006 0:00	71.9	97.5	0.8	147.9	63.7	112.1	1.5	120
2/26/2006 1:00	100.3	111.4	0.5	147.9	63.5	114.1	2.1	120
2/26/2006 2:00	64.8	112.3	1.1	145.4	75.3	107.6	2.2	132.5
2/26/2006 3:00	61.8	112.4	1	140.1	85.4	90.2	0.8	127
2/26/2006 4:00	58.1	116	1.3	137.3	175.6	100.5	0.7	130
2/26/2006 5:00	58.9	120.1	2.2	143.5	289.4	111.3	1	129.8
2/26/2006 6:00	315.7	101.2	1.5	149.8	241.7	104.7	1	125.8
2/26/2006 7:00	317.3	104.1	0.8	142.1	60.9	116.5	1.9	122.1
2/26/2006 8:00	482.3	111.7	1.1	131.4	61.8	107.8	2.3	122
2/26/2006 9:00	53.8	119.9	1.8	130	62.7	110.2	2	121.9
2/26/2006 10:00	53.6	117.3	2.2	130.1	64.6	114	2.4	122
2/26/2006 11:00	131.1	134.3	4.3	130.5	64.6	113.8	3.2	122
2/26/2006 12:00	147.5	126.8	5.2	134.7	66	122	3.4	121.9
2/26/2006 13:00	110	238.5	5.2	144.6	66.4	108.6	3.5	122.8
2/26/2006 14:00	58.7	196	5.2	149.8	67.4	146	3.5	125.9
2/26/2006 15:00	61.3	167.8	5.2	150.2	69.6	198.5	3.5	128.9
2/26/2006 16:00	60.6	132.4	4.2	143.6	88	122	3.5	130
2/26/2006 17:00	59.7	89.6	1.3	136	84.9	103	3.1	131.1
2/26/2006 18:00	47.1	126	2.1	126.5	78.6	109.1	2.6	133.9
2/26/2006 19:00	190	124	3.7	134.5	78.2	107.6	2.1	134.4
2/26/2006 20:00	53.5	108.7	3.8	136.4	76	107.1	1.4	134
2/26/2006 21:00	61.3	108.1	3.7	140.6	73.8	108.2	0.9	134.1

Date/Time	Kiln 1				Kiln 2			
	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed Rate (tph)	CO (ppm)	NOx (ppm)	Ammonia (gpm)	Kiln Feed rate (tph)
2/26/2006 22:00	58.9	105.6	2.8	143.7	72.6	105.2	0.7	132.2
2/26/2006 23:00	60.3	107	2.8	143.1	119.1	120.5	1.7	130
2/27/2006 0:00	58.1	106.5	2.1	139.8	70.3	104.3	1.8	129.9
2/27/2006 1:00	60.7	111.5	2.3	140	69	104.7	0.8	130
2/27/2006 2:00	59.4	104.7	1.6	139.9	71.4	109.2	0.8	129.9
2/27/2006 3:00	59	110	1.4	139.8	73.4	108.1	0.7	128.4
2/27/2006 4:00	57.9	114.4	1.6	136.7	70.1	112.5	1.1	127
2/27/2006 5:00	56.4	117.6	2.2	131.7	68.1	109.5	1.4	125.6
2/27/2006 6:00	53.3	135.6	4.5	130	71	116.4	2.1	125
2/27/2006 7:00	187	140.1	5.1	131.7	106.7	105.7	1.6	125
2/27/2006 8:00	192.6	217.8	5.1	131.9	72.1	120.8	3	125
2/27/2006 9:00	193	299.1	5.1	132.2	72.1	243.7	3.4	126.3
2/27/2006 10:00	57.6	335.7	5.1	139.2	159.7	267.4	3.4	133
2/27/2006 11:00	61.3	293.9	5.1	146.8	123.7	229.8	3.4	141.6
2/27/2006 12:00	69.6	222.8	5.2	150	118.8	86.5	1.3	137.3
2/27/2006 13:00	71.1	86.7	4.9	150.1	77.7	115.5	2.8	132.7
END								

ATTACHMENT 3

Report in Confidential Cabinet

Selective Non-Catalytic Reduction Testing

At

Cemex Balcones
New Braunfels, TX, USA

Written By

Curtis Pepe	Peter Paone	Mark Leyrer
Emissions Specialist	Process Engineer	Commissioning Engineer

May 6, 2005

ATTCHMENT 4

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **No. 1 Kiln Stack**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **150 feet**	7. Exit Diameter: **13.0 feet**
8. Exit Temperature: **285°F**	9. Actual Volumetric Flow Rate: **315,000 acfm**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: **195,785 dscfm**	12. Nonstack Emission Point Height: **N/A** feet	
13. Emission Point UTM Coordinates... Zone: **17** East (km): **356.007** North (km): **3169.248**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **No. 2 Kiln Stack**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **105 feet**	7. Exit Diameter: **14.0 feet**
8. Exit Temperature: **250°F**	9. Actual Volumetric Flow Rate: **315,000 acfm**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **N/A** feet	
13. Emission Point UTM Coordinates... Zone: **17** East (km): **356.052** North (km): **3169.261**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

Sheplak, Scott

From: Nelson, Deborah
Sent: Thursday, November 10, 2005 5:18 PM
To: Sheplak, Scott
Cc: Linero, Alvaro
Subject: CEMEX

Scott,

I have a question concerning the CEMEX application and modeling.

1. The coordinates in the application for Kiln 1 and Kiln 2 are 356250 m E, 3168370 m N and 356300 m E, 3168380 m N respectively. In the modeling for Kiln 1 and Kiln 2, 356007 m E. 3169248 m N and 356052 m E, 3169261 m N is used. Please verify which coordinates are correct.

Thanks,

Debbie

Debbie Nelson
Meteorologist
Air Permitting South
850-921-9537
deborah.nelson@dep.state.fl.us

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

PERMITTEE:

CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

Authorized Representative:
Jimmy L. Rabon, Plant Manager

Air Permit No 0530010-018-AC
Brooksville North Cement Plant
Facility ID No. 0530010
SIC No. 3241 Cement, Hydraulic
Cement Processing Lines 1 and 2
Permit Expires: September 30, 2008

PROJECT AND LOCATION

This permit authorizes the installation of cooling dampers on Kiln 1 and adjustments to the material loading and transfer rates for raw material and product silos and bins related to Lines 1 and 2. It also allows use of supplier-provided records in lieu of sampling by the operator of each shipment.

The Brooksville North Cement Plant is located on Highway 98, northwest of Brooksville, in Hernando County, Florida.

STATEMENT OF BASIS

This 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 perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

CONTENTS

Joseph Kahn, Director
Division of Air Resource Management

1/23/08
(Date)

FACILITY AND PROJECT DESCRIPTION

The existing facility consists of two Portland cement lines (Lines 1 and 2) including: two Polysius GEPOL preheater kilns (Kilns 1 and 2), two clinker coolers and associated raw mills, finish mills, cement and clinker handling equipment, coal handling equipment, silos, and air pollution control devices. The nominal capacity of each kiln is 780,000 tons per year of clinker.

This permit authorizes the installation of two cooling dampers on Kiln 1 and adjustments to the material loading and transfer rates for raw material and product silos and bins related to Lines 1 and 2. It also allows use of supplier-provided records in lieu of sampling by the operator of each shipment.

The emissions units affected by this action are:

EU ID	Emissions Unit Description
003	Cement Kiln No. 1
014	Cement Kiln No. 2
005	Finish Mills 1 and 2
006	Clinker Storage Silos 1 and 2
011	Raw Material Storage Silos and Feed System
016	Clinker Storage Silos 3
024	Raw Material Pre-Mix Bin
025	Additive Material Storage Bin
026	Cement Bag Loadout System

REGULATORY CLASSIFICATION

The facility is a major source of hazardous air pollutants (HAP).

The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

The facility is a major stationary source (PSD-major source) in accordance with Rule 62-212.400, F.A.C.

The facility operates units subject to the Standards of Performance for New Stationary Sources pursuant to 40 CFR Part 60.

The facility operates units subject to National Emissions Standards for Hazardous Air Pollutants pursuant to 40 CFR Part 63.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; and the Department's Technical Evaluation and Preliminary Determination.

1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation 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 Office. The mailing address and phone number of the Southwest District Office is: 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926; 813-632-7600.

3. Appendices: The following Appendices are attached as part of this permit: Appendix SC (Standard Conditions); Appendix GC (General Conditions).

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. Source Obligation:

   a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]

8. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Bureau of Air Regulation with copies to the Compliance Authority.
   [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

This section of the permit addresses the following existing emissions units.

Emissions Unit 003 and 014 (Kilns 1 and 2)

Description: Dry preheater process kiln and clinker cooler systems employing the Polysius GEPOL preheater design.

Fuels: Each kiln is limited to a fuel heat input of 300 million British thermal units (MMBtu) per hour. Allowable fuels include: coal, Nos. 2, 4, 5, and 6 fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. Kiln No. 1 is also permitted to fire whole tire derived fuel.

Capacity: Each kiln is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour, and a maximum annual limit of 1,300,000 TPY.

Controls: A baghouse is used on each kiln for the control of particulate matter (PM) emissions. Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compounds (VOC). Selective non catalytic reduction (SNCR) systems have been installed on each kiln for NO_X control.

Monitors: Emissions of CO and NO_X are continuously monitored on both kilns.

Stack Parameters:

The stack for Kiln No. 1 has the following characteristics: stack height is 150 feet, exit diameter is 13 feet, exit temperature is 285 °F, and actual volumetric flow rate is approximately 315,000 acfm.

The stack for Kiln No. 2 has the following characteristics: stack height is 105 feet, exit diameter is 14 feet, exit temperature is 250 °F, and actual volumetric flow rate is approximately 315,000 acfm.

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit subsection, supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

EQUIPMENT DESCRIPTION

2. Kiln No. 1 Cooling Dampers: The permittee is authorized to install, operate, and maintain: two cooling dampers (designated as 323 E and 323 N) on the existing Kiln No. 1 bypass duct system; an automatic damper positioner for damper 323 N; and a damper monitoring system. The automatic damper positioner makes adjustments based on the current baghouse inlet temperature. Damper 323 N is automatically adjusted by the system to maintain the baghouse inlet temperature established during the most recent dioxin and furan (D/F) compliance test. Damper position is recorded on the programmable logic controller (PLC) in the control room. [Application; Design]

EMISSIONS AND TESTING REQUIREMENTS

3. Emissions Standards: This permit does not establish any new emissions standards or testing requirements for Kilns 1 and 2. These kilns shall continue to comply with the requirements of all existing, valid Department permits. [Rule 6-4.070 (3), F.A.C.]

MONITORING AND RECORD KEEPING REQUIREMENTS

4. Kiln No. 1 Cooling Damper Process Monitoring: The following parameters shall be continuously monitored and recorded during all modes of operation including raw mill on and raw mill off, and all transition periods between operational modes:
   a. The position of each damper associated with gas cooling for the purpose of D/F control (closed or position with respect to fully open);
   b. Any monitored airflows within the bypass duct system; and
   c. Any monitored temperature within the bypass duct system.

   [Rule 62-4.070(3), F.A.C.]

5. Kiln No. 1 Process Monitor Data: For each parameter for which monitoring is required in Specific Condition 4 of this subsection, the information shall be recorded and stored as an electronic file and shall be available for inspection and printing within at least three days of a request by the Department. [Rule 62-4.070(3), F.A.C.]

6. Kiln No. 1 and 2 Liquid Fuel (No. 2, 4, 5 and 6 fuel oil) Records: The permittee is already required by previous or current permits to maintain and make available records of sulfur content and heating value (Btu/gal) of each liquid fuel oil shipment based upon analysis of a representative sample of the shipment. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the applicant. [Permits 0530010-003-AC/PSD-FL-233 and 0530010-002-AV; Applicant Request]

7. Kiln No. 1 and 2 On-Specification Used Oil Fuel Records: The permittee is already required by previous or current permits to maintain records to insure the on-specification used fuel oil burned in Kilns 1 and 2 meets the requirements listed in 40 CFR Part 279, Standards for the Management of Used Oil (PCB reference added). The permittee is already required to keep records of the results of the analysis of representative as-received samples taken from each daily shipment received or collected at the facility. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement for daily shipments received. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the applicant. [Permits 0530010-003-AC/PSD-FL-233 and 0530010-002-AV; Applicant Request]

B. Emissions and Operating Rates Modifications

This section addresses the following emissions units:

EU ID	Emissions Unit Description
005	Finish Mills 1 and 2 with two dust collectors (Baghouse G-23)
006	Clinker Storage Silos 1 and 2 (Baghouse F-31)
011	Raw Material Storage Silos and Feed System (Baghouse C-11 and C-11A)
016	Clinker Storage Silos 3 (Baghouse L-07)
024	Raw Material Pre-Mix Bin (Baghouse M-2280)
025	Additive Material Storage Bin (Baghouse M-1171)
026	Cement Bag Loadout System (Baghouse M-3514)

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit subsection, supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, testing, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

PERFORMANCE REQUIREMENTS

2. Finish Mill Nos. 1 and 2 Process Rate Limitation: The maximum transfer rate of these two finish mills combined shall not exceed 105 tons per hour. [Rule 62-4.070(3), F.A.C.; Applicant request]
3. Clinker Storage Silos Nos. 1 and 2 Process Rate Limitation: The maximum clinker loading rate of these two silos shall not exceed 93 tons per hour. [Rule 62-4.070(3); Applicant request]
4. Raw Materials Storage and Feed System Process Rate Limitation: The maximum transfer rate from the Raw Materials Silos to the Raw Materials Pre-Mix Bin shall not exceed 330 tons per hour (daily average dry basis). [Rule 62-4.070(3), F.A.C.; Applicant request]
5. Clinker Storage Silos No. 3 Process Rate Limitation: The maximum loading rate of this silo shall not exceed 93 tons per hour. [Rules 62-4.070(3) F.A.C.; Applicant request]
6. Raw Materials Pre-mix Bin Process Rate Limitation: The maximum loading rate of raw materials to the Raw Materials Pre-Mix Bins and material handling system shall not exceed 330 tons per hour (daily average dry basis). [Rule 62-4.070(3) F.A.C.; Applicant request]
7. Additive Material Storage Bin Process Rate Limitation: The maximum loading rate of the Additive Material Storage Bin shall not exceed 36 tons per hour. [Rule 62-4.070(3) F.A.C.; Applicant request]
8. Cement Bag Loadout System Hours of Operation: The operation time for this system shall not exceed 7400 hours per year. [Rule 62-4.070(3) F.A.C.; Applicant request]

EMISSIONS AND TESTING REQUIREMENTS

9. Particulate Matter (PM/PM_{10}) and Visible Emissions Limits Cement Bag Loadout System:

   This permit does not establish any new emissions standards or testing requirements except to change the annual emissions limit for Emissions Unit 026, Cement Bag Loadout System, given in existing permits from 1.87 to 2.22 tons per year. The presently applicable visible emissions testing requirements in lieu of stack testing continue to apply. [Permit AC27-185904; Rule 62-297.620(4), F.A.C.; Applicant Request]

10. Particulate Matter and Visible Emissions Limits for Finish Mills 1 and 2 (baghouse G-23):

    PM/PM_{10} emissions for the Finish Mill 1 and 2 (baghouse G-23) shall not exceed 9 lb/hr and 39.4 tons per year (each). Visible emissions shall not exceed 10 % opacity.

11. Testing Requirements: The finish mills 1 and 2 (baghouse G-23) shall be stack tested by September 30, 2007 to demonstrate initial compliance with the applicable emission standards for PM/PM_{10} and visible emissions. Thereafter, compliance with the PM/PM_{10} limits shall be demonstrated during each federal fiscal year (October 1st to September 30th). After conducting the initial stack test, the applicant may request a revision of the visible emissions standard to 5% opacity and rely on adherence to that standard in lieu of annual stack test demonstrations. [Rules 62-297.310(7)(c) and 62-297.620(4), F.A.C.]

12. Test Methods: Any required tests shall be performed in accordance with the following reference methods and the applicable requirements of Appendix SC (Standard Conditions) of this permit, and the applicable NESHAP provisions.

Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Matter from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

ADDITIONAL REPORTING AND RECORD KEEPING

13. Baghouse O&M Plan: For each baghouse the permittee shall maintain an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Compliance Authority prior to any compliance tests for this unit. [Rule 62-4.070(3), and 40 CFR 63.1350, Subpart LLL]

14. Test Reports: For each test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. [Rules 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology ( );
    b. Determination of Prevention of Significant Deterioration ( );
    c. Compliance with National Emission Standards for Hazardous Air Pollutants (X); and
    d. Compliance with New Source Performance Standards (X).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX SC

STANDARD CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at this facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and62-210.200(203), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

11: Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

12. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

    a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

    b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

    c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    [Rule 62-297.310(4), F.A.C.]

14. Determination of Process Variables

    a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

    b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

    [Rule 62-297.310(5), F.A.C.]

15. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

16. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

17. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

    1) The type, location, and designation of the emissions unit tested.

2) The facility at which the emissions unit is located.
3) The owner or operator of the emissions unit.
4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8) The date, starting time and duration of each sampling run.
9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10) The number of points sampled and configuration and location of the sampling plane.
11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12) The type, manufacturer and configuration of the sampling equipment used.
13) Data related to the required calibration of the test equipment.
14) Data on the identification, processing and weights of all filters used.
15) Data on the types and amounts of any chemical solutions used.
16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18) All measured and calculated data required to be determined by each applicable test procedure for each run.
19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

19. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Air Permit by:

Mr. Jimmy L. Rabon, Plant Manager
Brooksville North Cement Plant
CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

DEP File No. 0530010-018-AC
Brooksville North Cement Plant
Cooling Dampers and Operational Changes
Hernando County

/

Enclosed is the Final Permit Number 0530010-018-AC authorizing the installation of two cooling dampers, 323E and 323N; changes to the liquid fuel sampling requirements for Kilns 1 and 2; an increase in the operating hours for the cement bag loadout system; and increases of the transfer and loading rates for the finish mills and various raw material and product storage bins and silos. CEMEX existing Brooksville North Cement Plant is located northwest of Brooksville in Hernando County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Permit) and all copies were sent electronically (with Received Receipt) before the close of business on **January ~~23~~ 24, 2008** to the person(s) listed:

Jimmy L. Rabon, CEMEX: jimmy.rabon@cemexusa.com
Charles Walz, CEMEX: charles.walz@cemexusa.com
Amarjits Gill, CEMEX: amarjits.gill@cemexusa.com
Mara Nasca, DEP SWD: mara.nasca@dep.state.fl.us
Max Lee, P.E., Koogler and Associates: mlee@kooglerassociates.com
Jim Little, EPA Region 4: little.james@epamail.epa.gov
Katy Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Dee Morse, National Park Service: dee_morse@nps.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) (Date) 1/24/08

Memorandum

Florida Department of Environmental Protection

TO: Joseph Kahn, Director, Division of Air Resource Management

THROUGH: Trina Vielhauer, Chief, Bureau of Air Regulation

FROM: Al Linero and Teresa Heron, Permitting South

DATE: January 22, 2008

SUBJECT: Final Air Permit No. 0530010-018-AC
CEMEX Brooksville North Cement Plant
Cooling Dampers and Operational Changes

Attached for your review are the following items:

- Final Notice;
- Final Determination; and
- Final Permit.

The Final Determination explains the purpose of the project and the events since issuance of the Draft Permit so we have not repeated these here. We recommend your approval of the attached final permit for this project.

Attachments

FINAL DETERMINATION

CEMEX Cement, Inc.

Brooksville North Cement Plant

DEP File No. 0530010-018-AC

Cooling Damper Installation and Operational Changes

On August 3, 2007 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" to authorize the following changes at the CEMEX Brooksville North Cement Plant:

- Installation of two cooling dampers on Kiln 2;
- Changes to the liquid fuel sampling requirements for Kilns 1 and 2;
- Increase of the operating hours for the cement bag loadout system; and
- Increase of the transfer and loading rates for the finish mills and various raw material and product storage bins and silos.

CEMEX did not publish the Public Notice of Intent to Issue an Air Construction Permit (Notice) until January 7, 2008. CEMEX filed motions on August 16 and September 14, 2007 "to work out an issue of concern (thallium sampling) in the draft construction permit." These requests were granted and the last one expired on November 15, 2007.

For reasons explained in the Technical Evaluation and Preliminary Determination accompanying the draft action, the Department did not remove an existing requirement to take daily samples of the Kiln 1 particulate control equipment dust and test them for thallium (Tl).

On October 26, 2007 the Department received a letter from the Hernando County Planning Department (who were involved in specifying the original Tl sampling requirement) describing the conditions under which they would support some changes to the Tl sampling requirement. These included institution of mercury (Hg) emissions testing and monitoring and maintenance of dust sampling for Tl at a reduced frequency. The County requested the Department to "review the County's position in this matter and let us know if any further action is needed by the County."

Instead of requesting a further extension, CEMEX submitted a proposal on November 15, 2007 for Hg raw material and fuel input monitoring and reduced control equipment Tl sampling. Following discussions with the Department, CEMEX verbally requested through its consultant (Koogler and Associates) withdrawal of the November 15 proposal to allow prompt finalization of the permit and with the understanding that the Tl issue would be reassessed through a permitting action following publication of the Notice and issuance of the final permit for the changes allowed by the draft permit.

By memo dated December 5, 2007 the Department's Office of General Council closed out the case file. CEMEX published the Notice on January 8 and provided proof of publication to the Department.

The final action of the Department is to issue the permit. The only changes compared with the draft permit relate to the designation of a new plant manager and the renaming of the facility as the Brooksville North Cement Plant following acquisition by CEMEX of the Rinker/Florida Crushed Stone Cement plant also in Brooksville.

The Department will concurrently open an additional permitting project based on the original request to remove the Tl requirement and the subsequent input from Hernando County, CEMEX and further review by the Department.

Harvey, Mary

From: Harvey, Mary

Sent: Thursday, January 24, 2008 4:06 PM

To: 'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'

Cc: Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria

Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Attachments: CEMEX BROOKSVILLE NORTH CEMENT PLANT - 0530010-018-AC-FINAL.zip

Tracking:

Recipient	Read
'jimmy.rabon@cemexusa.com'	
'charles.walz@cemexusa.com'	
'amarjits.gill@cemexusa.com'	
Nasca, Mara	Read: 1/24/2008 4:21 PM
'mlee@kooglerassociates.com'	
'little.james@epamail.epa.gov'	
'forney.kathleen@epa.gov'	
'dee_morse@nps.gov'	
Linero, Alvaro	Read: 1/24/2008 4:08 PM
Heron, Teresa	Read: 1/25/2008 8:50 AM
Walker, Elizabeth (AIR)	
Gibson, Victoria	Read: 1/24/2008 4:18 PM

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Harvey, Mary

From: Charles E Walz [charles.walz@cemex.com]
Sent: Thursday, January 24, 2008 4:35 PM
To: Harvey, Mary
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Return Receipt

Your document:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
was received by:	charles.walz@cemex.com
at:	01/24/2008 16:34:42 EST

Harvey, Mary

From: Jimmy L Rabon [jimmy.rabon@cemex.com]
Sent: Thursday, January 24, 2008 4:36 PM
To: Harvey, Mary
Subject: Re: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Jimmy L. Rabon

Plant Manager - Cement Operations - United States of America
Office : (352)799-2057 , Fax: (352)754-9836 , Mobile: (352)279-5424
Address: 16301 Ponce De Leon Blvd, Brooksville, Fl 34614
E-Mail: jimmy.rabon@cemex.com

Harvey, Mary

From: Charles E Walz [charles.walz@cemex.com]
Sent: Thursday, January 24, 2008 4:40 PM
To: Harvey, Mary
Subject: Re: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Thanks Mary

Charles E Walz
Environmental Manager - Brooksville Plant - United States of America
Office : +1352(799)2011 , Fax: +1352(754)9836 , Mobile: +1352(279)1415
Address: 16301 Ponce de Leon Blvd Brooksville, Florida 34614
E-Mail: Charles.Walz@CEMEXUSA.com
www.cemexusa.com

Harvey, Mary

From: Amarjit S Gill [amarjits.gill@cemex.com]
Sent: Thursday, January 24, 2008 6:11 PM
To: Harvey, Mary
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Return Receipt

Your document:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
was received by:	amarjits.gill@cemex.com
at:	01/24/2008 17:13:09

Harvey, Mary

From: Linero, Alvaro
To: Harvey, Mary
Sent: Thursday, January 24, 2008 4:08 PM
Subject: Read: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Your message

To:	'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc:	Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
Sent:	1/24/2008 4:06 PM

was read on 1/24/2008 4:08 PM.

Harvey, Mary

From: Jimmy L Rabon [jimmy.rabon@cemex.com]
Sent: Thursday, January 24, 2008 4:14 PM
To: Harvey, Mary
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Return Receipt

Your document:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
was received by:	jimmy.rabon@cemex.com
at:	01/24/2008 16:13:54 EST

Harvey, Mary

From: Nasca, Mara
To: Harvey, Mary
Sent: Thursday, January 24, 2008 4:21 PM
Subject: Read: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Your message

To:	'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc:	Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
Sent:	1/24/2008 4:06 PM

was read on 1/24/2008 4:21 PM.

Harvey, Mary

From: Gibson, Victoria
To: Harvey, Mary
Sent: Thursday, January 24, 2008 4:18 PM
Subject: Read: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Your message

To:	'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc:	Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
Sent:	1/24/2008 4:06 PM

was read on 1/24/2008 4:18 PM.

Harvey, Mary

From: Dee_Morse@nps.gov
Sent: Thursday, January 24, 2008 4:11 PM
To: Harvey, Mary
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Return Receipt

Your document:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
was received by:	Dee Morse/DENVER/NPS
at:	01/24/2008 02:10:47 PM

Harvey, Mary

From: Heron, Teresa
To: Harvey, Mary
Sent: Friday, January 25, 2008 8:50 AM
Subject: Read: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Your message

To:	'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc:	Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject:	Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT
Sent:	1/24/2008 4:06 PM

was read on 1/25/2008 8:50 AM.

Harvey, Mary

From: Max Lee [mlee@kooglerassociates.com]
Sent: Wednesday, January 30, 2008 3:37 PM
To: Harvey, Mary
Subject: RE: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Hi Mrs. Harvey,
I did receive that email.

Thanks,
Max Lee

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Wednesday, January 30, 2008 3:34 PM
To: mlee@kooglerassociates.com; Ms. Kathleen Forney, EPA Region 4; little.james@epamail.epa.gov
Subject: FW: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

This permit was emailed to you on January 24th. I have not received your read receipt back yet. Please email me so that I can check your names off of the read receipts list.
Thanks,
Mary Harvey

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.
From: Harvey, Mary
Sent: Thursday, January 24, 2008 4:06 PM
To: 'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc: Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site:
http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other

Harvey, Mary

From: Forney.Kathleen@epamail.epa.gov
Sent: Thursday, January 31, 2008 10:40 AM
To: Harvey, Mary
Cc: little.james@epamail.epa.gov
Subject: Re: FW: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

Thanks Mary, we received them.

Katy R. Forney
Air Permits Section
EPA - Region 4
61 Forsyth St., SW
Atlanta, GA 30303

Phone: 404-562-9130
Fax: 404-562-9019

"Harvey, Mary" <Mary.Harvey@dep.state.fl.us>
01/24/2008 04:07 PM

To: Kathleen Forney/R4/USEPA/US@EPA, James Little/R4/USEPA/US@EPA
cc:
Subject: FW: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey.

From: Harvey, Mary
Sent: Thursday, January 24, 2008 4:06 PM
To: 'jimmy.rabon@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'mlee@kooglerassociates.com'; 'little.james@epamail.epa.gov'; 'forney.kathleen@epa.gov'; 'dee_morse@nps.gov'
Cc: Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria
Subject: Final Air Permit No. 0530010-018-AC - CEMEX BROOKSVILLE NORTH CEMENT PLANT

CEMEX

January 9, 2008

UPS Overnight Delivery

Ms. Teresa Heron
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32399-2400

RE: CEMEX Cement, Inc
Brooksville Cement Kilns 1 and 2
NOTICE OF APPLICATION
Proof of Publication
DEP File No. 0530010-018-AC
Hernando County

Dear Teresa:

Please find enclosed the original Proof of Publication of the public notice for the above referenced Notice of Application. The public notice is dated January 7, 2008 and ran in the Hernando Today section of the Tampa Tribune.

If there are any questions concerning this information please contact me at (352) 799-2011

Sincerely,

CEMEX Cement, Inc.

Charles E. Walz
Environmental Manager

cc: File

Brooksville Plant
16301 Ponce De Leon Boulevard, Brooksville, FL 34614. USA, (352) 796-7241, Fax (352) 754-9836

RECEIVED
Jan 08 2008
[redacted]

HERNANDO TODAY
Published Daily
BROOKSVILLE, HERNANDO, FLORIDA
STATE OF FLORIDA
COUNTY OF HERNANDO:
Before the undersigned authority personally appeared **Judy Warnock**, who on oath says that he/she is Legal Ad Coordinator of the Hernando Today/Hernando Sunday, a daily newspaper published at Brooksville in Hernando County, Florida: that the attached copy of the **advertisement, being a Legal Notice in the matter of Public Notice of Intent to Issue Air Construction Permit, CEMEX in the N/A Court, was published in said newspaper in the issues of January 7, 2008**

Affiant further says that the said Hernando Today/Hernando Sunday is a newspaper published at Brooksville, in said Hernando County, Florida, and that the said newspaper has heretofore been continuously published in said Hernando County, Florida, each week and has been entered as a second class mail matter at the post office in Brooksville, in said Hernando County, Florida for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Judy Warnock
(Signature of Affiant)

Sworn to and subscribed before me this 7th **day of** January **, 2008**

Andrew H Limbrecht
(Signature of Notary Public)

Notary Public State of Florida
Andrew H Limbrecht
My Commission DD667263
Expires 05/03/2011

(Name of Notary typed, printed or stamp)

Personally Known X **or**
Produced Identification _____
Type of Identification Produced _____

RECEIVED
JAN 11 2008
BUREAU OF AIR REGULATION

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0530010-018-AC

CEMEX Cement, Inc.
Brooksville Cement Plant Lines 1 and 2

Hernando County

The Department of Environmental Protection (the Department) gives notice of its intent to issue an air construction permit to CEMEX Cement, Inc. to install cooling dampers and make additional operational changes at the Brooksville Cement Plant on Highway 98, northwest of Brooksville in Hernando County. A determination of best available control technology was not required. The applicant's name and business address are CEMEX Cement, Inc., 16301 Ponce De Leon Boulevard, Brooksville, Florida 34614-0849.

The plant currently consists of: two portland cement lines designated as Lines 1 and 2, including two dry process preheater kilns (Kilns 1 and 2), two clinker coolers, associated raw mills, finish mills, cement and clinker handling equipment, coal handling equipment, silos, air pollution control devices, raw material extraction and receiving facilities and product shipping facilities.

The purpose of the dampers is to supply cooling air to rapidly quench exhaust gas from Kiln 1 to temperatures less than those characteristic of dioxin and furan formation.

Additional changes included in this action are: a change to the liquid fuel sampling requirements for Kilns 1 and 2; an the increase in the operating hours for the cement bag loadout system; and increases of the transfer and loading rates for the finish mills and various raw material and product storage bins and silos. No increases in kiln operation rates are required as a result of the operational changes.

The Department will issue the final air construction permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative determination (hearing) is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention in a proceeding (initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection Bureau of Air Regulation 111 S. Magnolia Drive, Suite 4 Tallahassee, Florida, 32301 Telephone: 850/488-0114 Fax: 850/922-6979	Department of Environmental Protection Southwest District Office 13051 N. Telecom Parkway Temple Terrace, Florida 33637-0926 Telephone: 813/744-6100 Fax: 813/744-6084

The complete project file includes the permit application, draft air construction permit, technical evaluation, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Teresa Heron at MS 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or Teresa.Heron@dep.state.fl.us, or call 850/921-9529 for additional information. Key documents may also be viewed at: www.dep.state.fl.us/Air/permitting/construction.htm and clicking on CEMEX in the cement plant category.

Ad# 2345719 January 7, 2008

CEMEX

December 13, 2007

UPS Overnight Delivery

Ms. Teresa Heron
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32399-2400

RE: CEMEX Cement, Inc
NOTICE OF APPLICATION
Proof of Publication
DEP File No. 0530010-018-AC
Hernando County

Dear Teresa:

Please find enclosed the original Proof of Publication of the public notice for the above referenced Notice of Application. The public notice is dated December 8, 2007 and ran in the Hernando Today section of the Tampa Tribune.

If there are any questions concerning this information please contact me at (352) 799-2011

Sincerely,
CEMEX Cement, Inc.

Charles E. Walz
Environmental Manager

cc: File

Brooksville Plant
16301 Ponce De Leon Boulevard, Brooksville, FL 34614. USA, (352) 796-7241, Fax (352) 754-9836

HERNANDO TODAY
Published Daily
BROOKSVILLE, HERNANDO, FLORIDA
STATE OF FLORIDA
COUNTY OF HERNANDO:

Before the undersigned authority personally appeared **Judy Warnock**, who on oath says that he/she is Legal Ad Coordinator of the Hernando Today/Hernando Sunday, a daily newspaper published at Brooksville in Hernando County, Florida: that the attached copy of the **advertisement, being a Legal Notice in the matter of** **Intent to Issue Air Construction Permit case# DEP File No. 0530010-018-AC in the N/A Court, was published in said newspaper in the issues of December 8, 2007**

Affiant further says that the said Hernando Today/Hernando Sunday is a newspaper published at Brooksville, in said Hernando County, Florida, and that the said newspaper has heretofore been continuously published in said Hernando County, Florida, each week and has been entered as a second class mail matter at the post office in Brooksville, in said Hernando County, Florida for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Judy Warnock
(Signature of Affiant)

Sworn to and subscribed before me this 11th day of December, 2007

Denise Nohejl
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2008
Commission # DD 561939

(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

Legal Notices | **Legal Notices** | **Legal Notices**

In the Matter of an
Application for Permit by:
Mr. Jimmy L. Rabon, Plant Manager
Brooksville Cement Plant
CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

DEP File No. 0530010-018-AC
Brooksville Cement Plant
Portland Cement Lines 1 and 2
Kiln 1 Cooling Dampers
Operational Changes
Hernando County, Florida

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (the Department) gives notice of its intent to issue an air construction permit (copy of draft permit enclosed) to CEMEX Cement, Inc. for the proposed project as detailed in the application specified above and the attached Technical Evaluation for the reasons stated below.

CEMEX applied to the Department for an air construction permit to install cooling dampers on Kiln 1 for the control of dioxin/furan formation. CEMEX also requested through other applications a number of operational changes on Lines 1 and 2 including transfer and loading rates within the process. These additional requests were consolidated with the present application.

The Department has permitting jurisdiction under the provisions of Chapter 403.087 Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final construction permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

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number of the [illegible] and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

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Executed in Tallahassee, Florida.
Trina L. Vielhauer, Chief
Bureau of Air Regulation

December 8, 2007

BEST AVAILABLE COPY

RECEIVED

DEC 12 2007

HERNANDO TODAY
Published Daily
BROOKSVILLE, HERNANDO, FLORIDA
STATE OF FLORIDA
COUNTY OF HERNANDO:

Before the undersigned authority personally appeared **Judy Warnock**, who on oath says that he/she is Legal Ad Coordinator of the Hernando Today/Hernando Sunday, a daily newspaper published at Brooksville in Hernando County, Florida: that the attached copy of the **advertisement, being a Legal Notice in the matter of**

Intent to Issue Air Construction Permit case# DEP File No. 0530010-018-AC in the N/A Court, was published in said newspaper in the issues of December 8, 2007

Affiant further says that the said Hernando Today/Hernando Sunday is a newspaper published at Brooksville, in said Hernando County, Florida, and that the said newspaper has heretofore been continuously published in said Hernando County, Florida, each week and has been entered as a second class mail matter at the post office in Brooksville, in said Hernando County, Florida for a period of 1 year next preceding the first publication of the attached copy of advertisement; and affiant further says that he/she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Judy Warnock
(Signature of Affiant)

Sworn to and subscribed before me this 11th day of December, 2007

Denise Nohejl
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2008
Commission # DD 561939

(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

Legal Notices | Legal Notices | Legal Notices

In the Matter of an
Application for Permit by:
Mr. Jimmy L. Rabon, Plant Manager
Brooksville Cement Plant
CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

DEP File No. 0530010-018-AC
Brooksville Cement Plant
Portland Cement Lines 1 and 2
Kiln 1 Cooling Dampers
Operational Changes
Hernando County, Florida

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (the Department) gives notice of its intent to issue an air construction permit (copy of draft permit enclosed) to CEMEX Cement, Inc. for the proposed project as detailed in the application specified above and the attached Technical Evaluation for the reasons stated below.

CEMEX applied to the Department for an air construction permit to install cooling dampers on Kiln 1 for the control of dioxin/furan formation. CEMEX also requested through other applications a number of operational changes on Lines 1 and 2 including transfer and loading rates within the process. These additional requests were consolidated with the present application.

The Department has permitting jurisdiction under the provisions of Chapter 403.087 Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

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case# DEP File No. 0530010-018-AC
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(Signature of Affiant)

Sworn to and subscribed before me this 11th day of December, 2007

Denise Nohejl
(Signature of Notary Public)

DENISE NOHEJL
Notary Public - State of Florida
My Commission Expires Dec 19, 2008
Commission # DD 361939

(Name of Notary typed, printed or stamp)

Personally Known X or
Produced Identification _____
Type of Identification Produced

---

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Executed in Tallahassee, Florida.
Trina L. Vielhauer, Chief
Bureau of Air Regulation

December 8, 2007

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blairstone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor
Jeff Kottkamp
Lt. Governor
Michael W. Sole
Secretary

August 3, 2007

Electronically sent – Received Receipt requested.

michaelanthony.gonzales@cemexusa.com
Mr. Michael A. Gonzales, Plant Manager
Brooksville Cement Plant
CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

Re: DEP File No. 0530010-018-AC
Brooksville Cement Plant – Lines 1 and 2

Dear Mr. Gonzales:

Enclosed is the draft air construction permit (Draft Permit) to install cooling dampers on Kiln 1 and to make various operational changes on Lines 1 and 2 at the Brooksville Cement Plant in Hernando County. The Department's Intent to Issue Air Construction Permit, the Technical Evaluation, and the Public Notice of Intent to Issue Air Construction Permit are included.

The Public Notice must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, such as a newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, Program Administrator, at the letterhead address. If you have any questions regarding this matter, please contact Teresa Heron at (850)921-9529, Debbie Nelson at (850)921-9537, or Mr. Linero at (850)921-9523.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/th

Enclosures

In the Matter of an
Application for Permit by:

Mr. Michael Gonzales, Plant Manager
Brooksville Cement Plant
CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849
_____/

DEP File No. 0530010-018-AC
Brooksville Cement Plant
Portland Cement Lines 1 and 2
Kiln 1 Cooling Dampers
Operational Changes
Hernando County, Florida

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (the Department) gives notice of its intent to issue an air construction permit (copy of draft permit enclosed) to CEMEX Cement, Inc. for the proposed project as detailed in the application specified above and the attached Technical Evaluation for the reasons stated below.

CEMEX applied to the Department for an air construction permit to install cooling dampers on Kiln 1 for the control of dioxin/furan formation. CEMEX also requested through other applications a number of operational changes on Lines 1 and 2 including transfer and loading rates within the process. These additional requests were consolidated with the present application.

The Department has permitting jurisdiction under the provisions of Chapter 403.087 Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above actions are not exempt from permitting procedures. The Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Construction Permit. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final construction permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of the enclosed Public Notice. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the construction permit with the attached conditions unless a timely petition for an administrative determination (hearing) is filed pursuant to sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the

relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice, Technical Evaluation, and the Draft permit) and all copies were sent electronically (with Received Receipt) before the close of business on **August 3, 2007** to the persons listed:

Michael A. Gonzales, CEMEX: michaelanthony.gonzales@cemexusa.com
Charles Walz, CEMEX: charles.walz@cemexusa.com
Amarjits Gill, CEMEX: amarjits.gill@cemexusa.com
Mara Nasca, DEP SWD: mara.nasca@dep.state.fl.us
John Koogler, P.E. K&A: jkoogler@kooglerassociates.com
Fawn Bergen, P.E., K&A: fbergen@kooglerassociates.com
Administrator, Hernando County gkuhl@hernandocounty.us
Segundo J. Fernandez, Esq., OHF&C: sfernandez@ohfc.com
Jim Little, EPA Region 4: little.james@epamail.epa.gov
Kathy Forney, EPA Region 4: forney.kathleen@epamail.epa.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

(Clerk) 8/3/07 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0530010-018-AC

CEMEX Cement, Inc.
Brooksville Cement Plant Lines 1 and 2

Hernando County

The Department of Environmental Protection (the Department) gives notice of its intent to issue an air construction permit to CEMEX Cement, Inc. to install cooling dampers and make additional operational changes at the Brooksville Cement Plant on Highway 98, northwest of Brooksville in Hernando County. A determination of best available control technology was not required. The applicant's name and business address are CEMEX Cement, Inc., 16301 Ponce De Leon Boulevard, Brooksville, Florida 34614-0849.

The plant currently consists of: two portland cement lines designated as Lines 1 and 2, including two dry process preheater kilns (Kilns 1 and 2), two clinker coolers, associated raw mills, finish mills, cement and clinker handling equipment, coal handling equipment, silos, air pollution control devices, raw material extraction and receiving facilities and product shipping facilities.

The purpose of the dampers is to supply cooling air to rapidly quench exhaust gas from Kiln 1 to temperatures less than those characteristic of dioxin and furan formation.

Additional changes included in this action are: a change to the liquid fuel sampling requirements for Kilns 1 and 2; an the increase in the operating hours for the cement bag loadout system; and increases of the transfer and loading rates for the finish mills and various raw material and product storage bins and silos. No increases in kiln operation rates are required as a result of the operational changes.

The Department will issue the final air construction permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative determination (hearing) is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within 14 days of publication of the public notice or

within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention in a proceeding (initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code (F.A.C.).

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
111 S. Magnolia Drive, Suite 4
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/744-6100
Fax: 813/744-6084

The complete project file includes the permit application, draft air construction permit, technical evaluation, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Teresa Heron at MS 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or Teresa.Heron@dep.state.fl.us, or call 850/921-9529 for additional information. Key documents may also be viewed at: www.dep.state.fl.us/Air/permitting/construction.htm and clicking on CEMEX in the cement plant category.

TECHNICAL EVALUATION

CEMEX Cement, Inc.
Brooksville Cement Plant

Cooling Damper Installation
Operational Changes

Kilns 1 and 2

Hernando County

DEP File No. 0530010-018-AC

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation

August 3, 2007

I. APPLICATION INFORMATION

A. APPLICANT

Michael A. Gonzales, Plant Manager
CEMEX Cement, Inc.
Brooksville Plant
16301 Ponce de Leon Blvd.
Brooksville, Florida 34601

B. PROCESSING SCHEDULE

- The Department's Bureau of Air Regulation (BAR) received an application (0530010-018-AC) on October 14, 2005 that included requests to change thallium and fuel sampling requirements and to increase loading and transfer rates for raw material and product silos and bins.
- Additional requests under the same application to install indirect firing systems, new burners and selective non-catalytic reduction (SNCR) systems on Kilns 1 and 2 were processed separately through a permit (0530010-026-AC) issued on December 22, 2006.
- Additional requests under the same application related to petroleum coke and tire derived fuel were withdrawn or deferred by the applicant.
- The Department's Southwest District Office received an application (0530010-019-AC) on November 14, 2005 to install cooling dampers on Kiln 1.
- The Department received a request from the applicant dated August 15, 2006 requesting consolidation of the cooling damper application with application 0530010-018-AC.
- The Department issued and received responses to several requests for additional information. The final information was received on April 13, 2007.
- The Department received a request on July 11 from the applicant to waive the 90-day permit processing clock until July 25, 2007 to facilitate prompt revision and re-issuance of a separate draft permit for a new line at the facility.
- The Department distributed the Public Notice Package for project 0530010-018-AC on August 3, 2007.

C. FACILITY LOCATION

The CEMEX Brooksville Cement Plant is located on Highway 98, northwest of Brooksville in Hernando County. The following figure shows the location of the facility.

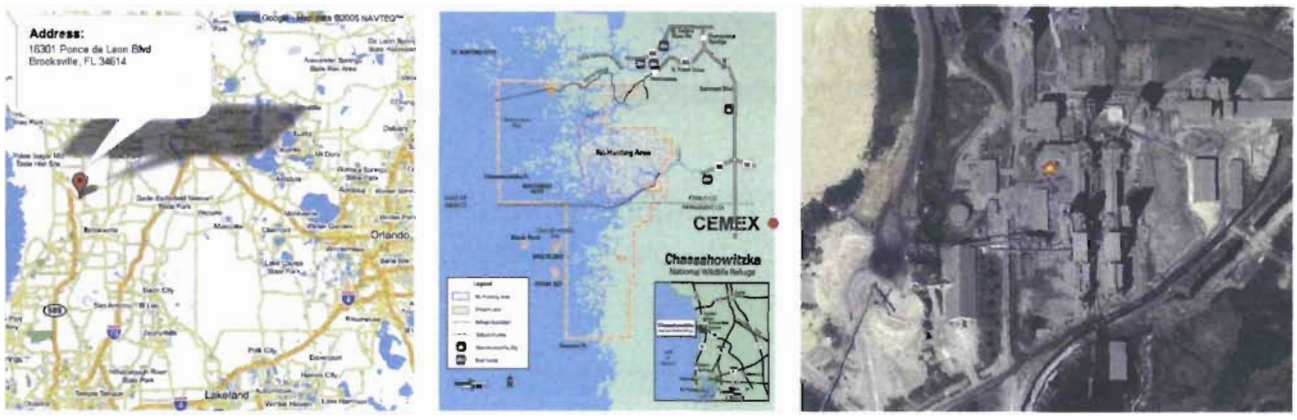

Figure 1. Location of CEMEX Brooksville Cement Plant, Chassahowitzka NWR, Aerial Photo

D. FACILITY CLASSIFICATION CODE (SIC)

Major Group No. 32, Clay, Glass, and Concrete Products
Industry Group No. 324 Cement, Hydraulic

E. REGULATORY CATEGORIES

The following regulatory classifications apply to the subject facility:

Title I, Section 111, Clean Air Act (CAA): This facility is subject to certain Standards of Performance for New Stationary Sources. They are adopted and incorporated by reference in Rule 62-204.800, F.A.C. These include:

- 40 CFR 60, Subpart A - General Provisions.
- 40 CFR 60, Subpart F - Standards of Performance for Portland Cement Plants. Certain requirements from Subpart F are replaced by requirements from 40 CFR 63, Subpart LLL listed below.
- 40 CFR 60, Subpart Y - Standards of Performance for Coal Preparation Plants.
- 40 CFR 60, Subpart OOO - New Source Performance Standards For Nonmetallic Mineral Processing Plants.

Title I, Section 112 CAA: The facility has the potential to emit 10 tons per year or more of any one hazardous air pollutant (HAP) or 25 tons per year or more of any combination of HAPs. This facility is subject to the Major Source provisions of:

- 40 CFR 63, Subpart A - National Emission Standards for Hazardous Air Pollutants – General Provisions.
- 40 CFR 63, Subpart LLL - National Emission Standards for Hazardous Air Pollutants from the Portland Cement Manufacturing Industry.

Title I, Part C: The facility is located in an area designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard. The facility is considered a "portland cement plant", which is one of the 28 Prevention of Significant Deterioration (PSD) source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source of air pollution with respect to Rule 62-212.400, F.A.C., Prevention of Significant Deterioration.

Title IV, CAA: The facility does not operate any units subject to the Acid Rain provisions of the CAA.

Title V, CAA: The facility is a Title V or "Major Source" of air pollution because the potential emissions of at least one regulated pollutant exceed 100 tons per year or because it is a major source of HAP. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

State Rules: The cement plant is subject to state Rule 62-296.407, F.A.C. (Portland Cement Plants).

Given that the facility is a Major Stationary Source with respect to the PSD regulations, then project emissions greater than 40 TPY of NO_X, VOC or SO_2, 7 TPY of sulfuric acid mist (SAM), 25/15 TPY of PM/PM_{10}, 3 TPY of fluorides, 0.1 TPY of mercury (Hg) or 1200 pounds per year (lb/yr) of lead (Pb) also require review pursuant to the PSD rules. Pollutants triggering these values require a determination of Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

F. Facility Description

The existing Brooksville portland cement plant consists of two lines (Lines 1 and 2). Lines 1 and 2 include Polysius GEPOL preheater kilns (Kilns 1 and 2) and clinker cooler (Coolers 1 and 2). A picture of one of the kilns with preheater tower and raw meal homogenizing silo can be seen in Figure 2. Lines 1 and 2 are separately permitted with respect to preheater material feed rates and fuel heat input rates. Ancillary equipment at the plant includes a quarry, raw material handling and conveying equipment, raw mills, finish mills, cement and clinker handling equipment, coal handling equipment and silos, and particulate control/dust collection and recycling equipment.

Large, fabric filter systems (baghouses) are used to capture $PMPM_{10}$ from each kiln and from each clinker cooler (four total). Smaller baghouses are used to limit particulate emissions from other process emissions points. Raw material properties, chemical reactions in the kilns, absorption into the clinker, and combustion controls minimize emissions of NO_X, SO_2, CO, and VOC. Further NO_X control is provided by recently installed Pillard Low NO_X main kiln burners and selective non-catalytic reduction (SNCR) systems.

Figure 2. Polysius GEPOL Preheater Kiln at CEMEX Brooksville Plant

Both CEMEX Brooksville kilns are limited to 150 tons dry preheater feed per hour (30 day average) with a maximum of 165 tons preheater feed in any given hour. Both kilns are permitted to burn a variety of fuels, including coal, No. 2 fuel oil, No. 4 fuel oil, No. 5 fuel oil, No. 6 fuel oil, natural gas, and on-site generated, non-hazardous waste used oil, grease, and rags. Kiln No. 1 is also permitted to fire whole tire derived fuel (TDF) at a rate up to 20 percent of the total heat input.

G. Application Requests

After withdrawal or deferment of some of the requests (petcoke and TDF) and separate processing of others (SNCR, burners and indirect firing), the remaining requests evaluated addressed in the present permitting action include:

- Increase the maximum transfer rate for Finish Mills 1 and 2 from 98 to 105 tons per hour (TPH);

- Reduce Finish Mills 1 and 2 combined PM limit from 36 lb per hour (lb/hr) and 157.7 tons per year (TPY) to 9 lb/hr and 39.4 TPY from each mill;
- Increase maximum loading rate of clinker silos 1, 2 and 3 from 84 to 93 TPH;
- Increase the raw material storage silos and feed system maximum transfer rate from 290 to 330 TPH (daily average, dry basis);
- Increase the raw material pre-mix bin maximum transfer rate from 290 to 330 TPH (daily average, dry basis);
- Increase the additive material storage bin maximum transfer rate from 30 to 36 TPH; and
- Increase the maximum operating hours of the cement bag loadout operation from 6,240 to 7,400 hours per year;
- Installation of two cooling dampers on Kiln 1;
- Removal of the Kiln 1 requirement for daily sampling for, and recording of thallium concentrations; and
- Allow use of liquid fuel suppliers' records in lieu of analysis of representative sample of each shipment (Permit No. 0530010-003-AC).

II. REGULATIONS THAT APPLY TO THE PROJECT

A. State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code. These include: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and BACT); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures).

B. General PSD Applicability Criteria

The Department regulates major air pollution sources in accordance with Florida's Prevention of Significant Deterioration (PSD) program in accordance with Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A new facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant; or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories defined in Rule 62-210.200, F.A.C.; or 5 tons per year of lead.

For new projects at existing PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the "Significant Emission Rates" (SER) defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and applicants must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant, and evaluate the air quality impacts.

Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several regulated pollutants that exceed the Significant Emission Rates.

The only PSD pollutant involved in this permitting action review is PM emissions changes as it relates to the different material handling baghouses transfer /production rates proposal.

III. ESTIMATES OF EMISSION INCREASES DUE TO PROJECTS

No increases in the kiln and cooler process and production rates have been requested or are expected. No emissions increases of the typical gaseous combustion products from pyroprocessing (e.g. NO_X, SO_2, VOC, CO) are requested or expected. The cooling dampers are for the purpose of controlling the manner by which cooling air is introduced in the area of the raw mill circuit to provide more rapid quenching of hot exhaust gases from the Kiln 1 preheater. In theory this additional temperature control is supposed to reduce the de novo formation of dioxin and furan (D/F) in the particulate control equipment (main baghouses).

The applicant has projected emissions of PM/PM_{10} to increase from the previously described materials handling operations (except for Finish Mills 1 and 2). Table 1 is a list of the applicant's estimated past actual emissions from the affected emissions units compared with the future potential emissions from those units. Revisions by the Department are also shown.

Table 1. Comparison of Past Actual to Future Potential PM/PM_{10} Emissions

Emission Unit No./Description	Permitted PM TPY	Past Actual PM/PM_{10} TPY	Future Potential PM/PM_{10} TPY	Project Increase (Decrease) PM/PM_{10}* TPY
E.U.005/Finish Mills 1 and 2 (both)	157.7	143.2 / 121.72	78.8 / 78.8**	(64.42) / (42.92)
E.U. 005/Finish Mills 1 and 2 (both) as Revised by Department	157.7	75 / 75	78.8 / 78.8	3 / 3
E.U.006/Clinker Storage Silos 1 and 2	5.72	1.53 / 1.44	5.72 / 5.72	4.19 / 4.28
E.U.011/Raw Material/Feed Silos	9.43	9.42 / 8.0	9.43 / 9.43	0.01 / 1.3
E.U.016/Clinker Storage Silo 3	5.95	5.78 / 4.91	5.95 / 5.95	0.17 / 1.04
E.U.024/Raw Material Pre-Mix Bin	2.54	2.52 / 2.14	2.54 / 2.54	0.02 / 0.40
E.U.025/Additive Material Storage Bin	11.30	10.30 / 8.76	11.30 / 11.30	1.0 / 2.54
E.U.026/Cement Bag Loadout System	1.87	1.36 / 1.16	2.22 / 2.22	0.86 / 1.06
Applicant's Estimate of Total PM/PM_{10} Increase (Decrease)				**(58.17) / (32.3)**
Department Estimate of Increase after revision of Estimate for Finish Mills 1 and 2				**9.25 / 13.62**

* Difference between Past Actual to Future Potential. PSD significance level of PM/PM_{10} = 25/15 TPY.

** Future Potential to emit for Finish Mills 1 and 2 based on application request for enforceable lb/hr limitation.

The Department does not dispute the estimates by the applicant except for those related to the finish mills. The finish mills are relatively large emissions units compared with the others listed. They have high flows and big baghouses. The estimates of past actual and permitted emissions for Finish Mills 1 and 2 provided by the applicant are based on calculations using the process weight table equations from Rule 62-296.320(4).

The applicant did not submit test data and relied upon past annual emissions estimates submitted to the Department in annual operating reports. They conducted visible emissions testing to demonstrate compliance with an opacity limitation of 10%.

The Department does not expect an actual decrease in emissions from Finish Mills 1 and 2 because the production rates are actually increasing to a small degree and no physical projects are specified leading to an expectation of emissions reductions. However, there are some benefits from the recent operation and maintenance plans required by the portland cement industry maximum achievable control technology (MACT) standards under 40 CFR 63, Subpart LLL.

Essentially the reductions are not "real" although the revised potential emissions can be made enforceable. The Department assumes that emissions in the past are a little less than the requested (lower) future potential emissions limit requested by the applicant.

The Department will assume that without physical changes, the finish mills will not emit less PM/PM_{10} emissions than in the past and will assume the changes in PM/PM_{10} emissions for the project will be zero (0). That will also prevent future use of the "imaginary reductions" for the purposes of "netting" to avoid triggering the PSD rules on future projects that may actually increase emissions.

The revised Department estimates of PM and PM_{10} increases for the requested changes are 6.25 and 10.62 TPY respectively. These values are less than the SER of 25 and 15 TPY for PM and PM_{10} respectively. Therefore a PSD review and BACT determination are not required.

IV. DEPARTMENT REVIEW OF REQUESTS

A. TRANSFER AND PRODUCTION RATES INCREASES FOR MINOR SOURCES

All of the emissions units affected by the transfer and production rate increases are adequately controlled by baghouses. Except for the cement bag loadout system, the same lb/hr limit will continue to apply at each emissions unit in the future as presently applies. With the exception of the finish mills and in lieu of conducting stack tests on each emissions unit, the applicant may rely on visible emissions testing and meet an opacity limitation of 5 percent as provided by Department rules 62-297.620(4) together with 62-310(7)(c).

In the case of the finish mills, the Department will require an initial PM stack test and a simultaneous opacity test within the present fiscal year to demonstrate compliance with the revised PM/PM_{10} emission limits of 9 lb/hr an opacity limit of 10%. After demonstrating compliance by the stack test, the applicant may thereafter request to satisfy the test requirement by meeting a 5% opacity limit. Until such a demonstration is made, the Department will require PM stack tests on an annual basis.

The requirements of 40 CFR 63, Subpart LLL apply to these emissions units. Accordingly, the applicant must, for each baghouse, maintain an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Department prior to any compliance tests for these units. Subpart LLL also requires adherence with and greater visible emissions testing frequency. This will insure more vigilance by the applicant regarding these emissions units to insure they comply with the 5% limitations.

The Department agrees with the requests to increase transfer and production rates for the specified non-pyroprocessing emissions units. The Department will issue a permit modification that will be a supplement to the previously issued permits.

B. COOLING DAMPERS

Part of this project is for the applicant's (after-the-fact) installation request of two dampers, 323E and 323N, for cooling the hot preheater gases from Kiln 1 to control dioxin and furans formation while the No. 1 Raw Mill is down. Dampers 323 E and 323N achieve the cooling required to control dioxin/furans formation. Damper 323 N is automatically controlled by the baghouse inlet temperature.

CEMEX provided the following details regarding the cooling dampers' operation: Damper 323 E will be in the open position when the No. 1 Raw Mill is down and in the closed position when the No.1 Raw Mill is in operation. There are no variable positions for Damper 323 E; it is either in the open or closed position. Damper 323 N is controlled by an automatic damper positioner based on the baghouse inlet temperature.

The baghouse inlet temperature set point is based on the limitation established during the compliance test and does not vary (40 CFR 63.1444(b)).

Damper operation/position is indicated to the control room operator by percentage readout on the control monitor. There is redundancy in the baghouse inlet temperature. Two thermocouples exist for monitoring the baghouse inlet temperature. If the signal from the thermocouple is lost or otherwise determined to be in error the control room operator will refer to the secondary thermocouple reading.

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.

The applicant provided the results of D/F emissions testing conducted since 2003. These indicate reductions in D/F emissions following installation of the dampers. The Department does not necessarily agree or disagree that the entire cause or that the main cause of the D/F reductions is the installation of the dampers to reduce de novo D/F formation in the control equipment.

Department has technical reasons suggesting that other phenomena contributed to D/F formation. These include raw materials such as high carbon fly ash from nearby power plants that use low NO_X burners or otherwise do not achieve efficient combustion in their respective furnaces. Such carbon is typically measured as "loss on ignition" (LOI) and can theoretically catalyze or (together with chlorides in the ash or fuel) provide the precursors to D/F formation.

The Department believes the dampers at least help reduce D/F and approves their after-the-fact installation. CEMEX has stated that they are considering additional projects to further regulate and stabilize temperature to prevent D/F formation. The key option under consideration is installation of gas conditioning towers between the preheaters and control equipment consistent with industry practice.

C. THALLIUM SAMPLING REQUIREMENTS

The requirement to conduct daily sampling for the semi-volatile metal, thallium (Tl), in the control equipment dust was included (at the request of the Hernando County Board of County Commissioners) in 1993 in conjunction with approval to burn tires in Kiln 1. The purpose was to control the tendency of Tl to build up in the external cycle of the preheater, raw mill, control equipment and feed silo.

According to the previous operator (Florida Mining and Manufacturing): "the Tl concentration is in the kiln/mill baghouse dust. We monitor the concentration of Tl on a daily basis and as we see the concentration increase, we remove a portion of the dust from the system and dispose of it in an authorized landfill. The removal is generally done on a day when the raw mill is down and the baghouse load is at minimum level, which conversely brings [SIC] the thallium concentration from the system with minimum level, which conversely brings the Tl concentration in the dust to maximum level. This allows us to remove maximum Tl from the system.

Immediately upon taking the raw mill down, we start to take samples of the baghouse dust every hour. These samples are analyzed by X-Ray Fluorescence (XRF) and the indicated concentration is recorded. When concentration level reaches approximately 0.8% we begin to load a tanker truck with the dust. We continue to monitor the concentration as the truck is being loaded and the final dust sample is taken at the end of the loading operation. The indicated concentration at the end of the truck loading will generally be in the 0.3% to 0.4% range. We average the first and last sample that went into the truck for the average concentration of the load. The normal average will be approximately 0.5% to 0.6% on the truck load of 14 to 16 tons of dust."

CEMEX now affirms that they have not wasted baghouse dust for the past four years for purpose of controlling the thallium concentration of the dust or for any other purpose (response to Request for Additional Information "RAI" March 1, 2006).

According to the RAI response, in the last 5 years none of the required tests have shown Tl concentrations that would exceed the permit limit of 1.5%. The monthly average Tl concentration for the two years period has been 0.31 percent and the range of individual thallium concentrations has been 0.02-1.33 %.

The applicant stated that the area currently being mined for limestone on the plant property has gradually turned toward the southwest over the last 6 years. The old mining area directly west of the plant was mined out and closed in the mid to late 1990's. According to CEMEX as its mining area has moved south/southwest of the plant area, the Tl levels have dropped in the limestone and the Tl concentrations in the baghouse dust have also dropped.

While Tl is not listed as a hazardous air pollutant (HAP), the values discussed above are seemingly high for this semi-volatile metal and would represent values in the dust of 200 to 13,000 ppm. By not removing dust, most Tl in the system is likely to be emitted from the stack (rather than via the hot clinker) together with any mercury (Hg) that may have been removed through processes analogous to those described for Tl.

The Department does not propose to make the requested changes.

D. Fuel Sampling Requirement

The applicant also requests to use the supplier's fuel analysis records for liquid fuels instead of conducting its own analysis of each sample representative of the shipment taken by CEMEX in accordance with the protocol given in the present permits. The applicant states that liquid fuels are only used to heat kilns during start up and comprise less than 1.5% of the total annual heat input to Kiln 1. Liquid fuel heating values and sulfur content are consistent. The permitted fuels are No. 2, No. 4, No. 5, No. 6 and on-specification used oil.

The Department agrees with this request but will require adherence to the same protocol regarding the properties of the oil used. The applicant will be required to maintain a purchasing specification applicable to shipment by its suppliers and records of compliance with those specifications.

E. Conclusions

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the Draft Permit. This determination is based on a technical review of the application, reasonable assurances provided by the applicant and the conditions specified in the Draft permit.

PERMITTEE:

CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

Authorized Representative:
Michael Gonzales, Plant Manager

Air Permit No 0530010-018-AC
Brooksville Cement Plant
Facility ID No. 0530010
SIC No. 3241 Cement, Hydraulic
Cement Processing Lines 1 and 2
Permit Expires: June 30, 2008

PROJECT AND LOCATION

This permit authorizes the installation of cooling dampers on Kiln 1 and adjustments to the material loading and transfer rates for raw material and product silos and bins related to Lines 1 and 2. It also allows use of supplier-provided records in lieu of sampling by the operator of each shipment.

The Brooksville Cement Plant is located on Highway 98, northwest of Brooksville, in Hernando County, Florida.

STATEMENT OF BASIS

This 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 perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

CONTENTS

(DRAFT)

_____ _____
Joseph Kahn, Director (Date)
Division of Air Resource Management

FACILITY AND PROJECT DESCRIPTION

The existing facility consists of two Portland cement lines (Lines 1 and 2) including: two Polysius GEPOL preheater kilns (Kilns 1 and 2), two clinker coolers and associated raw mills, finish mills, cement and clinker handling equipment, coal handling equipment, silos, and air pollution control devices. The nominal capacity of each kiln is 780,000 tons per year of clinker.

This permit authorizes the installation of two cooling dampers on Kiln 1 and adjustments to the material loading and transfer rates for raw material and product silos and bins related to Lines 1 and 2. It also allows use of supplier-provided records in lieu of sampling by the operator of each shipment.

The emissions units affected by this action are:

EU ID	Emissions Unit Description
003	Cement Kiln No. 1
014	Cement Kiln No. 2
005	Finish Mills 1 and 2
006	Clinker Storage Silos 1 and 2
011	Raw Material Storage Silos and Feed System
016	Clinker Storage Silos 3
024	Raw Material Pre-Mix Bin
025	Additive Material Storage Bin
026	Cement Bag Loadout System

REGULATORY CLASSIFICATION

The facility is a major source of hazardous air pollutants (HAPs).

The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

The facility is a major stationary source (PSD-major source) in accordance with Rule 62-212.400, F.A.C.

The facility operates units subject to the Standards of Performance for New Stationary Sources pursuant to 40 CFR Part 60.

The facility operates units subject to National Emissions Standards for Hazardous Air Pollutants pursuant to 40 CFR Part 63.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; and the Department's Technical Evaluation and Preliminary Determination.

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation 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 Office. The mailing address and phone number of the Southwest District Office is: 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926; 813-632-7600.
3. Appendices: The following Appendices are attached as part of this permit: Appendix BD (Final BACT Determinations and Emissions Standards); Appendix GC (General Conditions).
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. Source Obligation:
   a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
   b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

   [Rule 62-212.400(12), F.A.C.]
8. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Bureau of Air Regulation with copies to the Compliance Authority.
   [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

A. Cement Kilns 1 and 2 (EU ID 003 and 014)

This section of the permit addresses the following existing emissions units.

Emissions Unit 003 and 014 (Kilns 1 and 2)
Description: Dry preheater process kiln and clinker cooler systems employing the Polysius GEPOL preheater design. *Fuels*: Each kiln is limited to a fuel heat input of 300 million British thermal units (MMBtu) per hour. Allowable fuels include: coal, Nos. 2, 4, 5, and 6 fuel oil, natural gas, and on-site generated non-hazardous waste used oil and grease. Kiln No. 1 is also permitted to fire whole tire derived fuel. *Capacity*: Each kiln is limited to 150 tons of preheater feed per hour (rolling 30-day average), with a maximum of 165 tons in any one hour, and a maximum annual limit of 1,300,000 TPY. *Controls*: A baghouse is used on each kiln for the control of particulate matter (PM) emissions. Raw material properties, chemical reactions in the kiln, absorption into the clinker, and combustion controls minimize emissions of nitrogen oxides (NO_X), sulfur dioxide (SO_2), carbon monoxide (CO) and volatile organic compounds (VOC). Selective non catalytic reduction (SNCR) systems have been installed on each kiln for NO_X control. *Monitors*: Emissions of CO and NO_X are continuously monitored on both kilns. *Stack Parameters*: The stack for Kiln No. 1 has the following characteristics: stack height is 150 feet, exit diameter is 13 feet, exit temperature is 285 °F, and actual volumetric flow rate is approximately 315,000 acfm. The stack for Kiln No. 2 has the following characteristics: stack height is 105 feet, exit diameter is 14 feet, exit temperature is 250 °F, and actual volumetric flow rate is approximately 315,000 acfm.

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit subsection, supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

EQUIPMENT DESCRIPTION

2. Kiln No. 1 Cooling Dampers: The permittee is authorized to install, operate, and maintain: two cooling dampers (designated as 323 E and 323 N) on the existing Kiln No. 1 bypass duct system; an automatic damper positioner for damper 323 N; and a damper monitoring system. The automatic damper positioner makes adjustments based on the current baghouse inlet temperature. Damper 323 N is automatically adjusted by the system to maintain the baghouse inlet temperature established during the most recent dioxin and furan (D/F) compliance test. Damper position is recorded on the programmable logic controller (PLC) in the control room. [Application; Design]

EMISSIONS AND TESTING REQUIREMENTS

3. Emissions Standards: This permit does not establish any new emissions standards or testing requirements for Kilns 1 and 2. These kilns shall continue to comply with the requirements of all existing, valid Department permits. [Rule 6-4.070 (3), F.A.C.]

MONITORING AND RECORD KEEPING REQUIREMENTS

4. Kiln No. 1 Cooling Damper Process Monitoring: The following parameters shall be continuously monitored and recorded during all modes of operation including raw mill on and raw mill off, and all transition periods between operational modes:
   a. The position of each damper associated with gas cooling for the purpose of D/F control (closed or position with respect to fully open);
   b. Any monitored airflows within the bypass duct system; and
   c. Any monitored temperature within the bypass duct system.

   [Rule 62-4.070(3), F.A.C.]
5. Kiln No. 1 Process Monitor Data: For each parameter for which monitoring is required in Specific Condition 4 of this subsection, the information shall be recorded and stored as an electronic file and shall be available for inspection and printing within at least three days of a request by the Department. [Rule 62-4.070(3), F.A.C.
6. Kiln No. 1 and 2 Liquid Fuel (No. 2, 4, 5 and 6 fuel oil) Records: The permittee is already required by previous or current permits to maintain and make available records of sulfur content and heating value (Btu/gal) of each liquid fuel oil shipment based upon analysis of a representative sample of the shipment. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the applicant. [Permits 0530010-003-AC/PSD-FL-233 and 0530010-002-AV; Applicant Request]
7. Kiln No. 1 and 2 On-Specification Used Oil Fuel Records: The permittee is already required by previous or current permits to maintain records to insure the on-specification used fuel oil burned in Kilns 1 and 2 meets the requirements listed in 40 CFR Part 279, Standards for the Management of Used Oil (PCB reference added). The permittee is already required to keep records of the results of the analysis of representative as-received samples taken from each daily shipment received or collected at the facility. The permittee may use records provided by the fuel suppliers to satisfy this existing requirement for daily shipments received. If supplier records are used, the applicant shall prepare a purchasing specification that requires the suppliers to provide the same information to the applicant as presently required of the applicant. [Permits 0530010-003-AC/PSD-FL-233 and 0530010-002-AV; Applicant Request]

B. Emissions and Operating Rates Modifications

This section addresses the following emissions units:

EU ID	Emissions Unit Description
005	Finish Mills 1 and 2 with two dust collectors (Baghouse G-23)
006	Clinker Storage Silos 1 and 2 (Baghouse F-31)
011	Raw Material Storage Silos and Feed System (Baghouse C-11 and C-11A)
016	Clinker Storage Silos 3 (Baghouse L-07)
024	Raw Material Pre-Mix Bin (Baghouse M-2280)
025	Additive Material Storage Bin (Baghouse M-1171)
026	Cement Bag Loadout System (Baghouse M-3514)

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: The conditions of this permit subsection, supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, testing, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

PERFORMANCE REQUIREMENTS

2. Finish Mill Nos. 1 and 2 Process Rate Limitation: The maximum transfer rate of theses two finish mills combined shall not exceed 105 tons per hour. [Rule 62-4.070(3), F.A.C.; Applicant request]
3. Clinker Storage Silos Nos. 1 and 2 Process Rate Limitation: The maximum clinker loading rate of these two silos shall not exceed 93 tons per hour. [Rule 62-4.070(3); Applicant request]
4. Raw Materials Storage and Feed System Process Rate Limitation: The maximum transfer rate from the Raw Materials Silos to the Raw Materials Pre-Mix Bin shall not exceed 330 tons per hour (daily average dry basis). [Rule 62-4.070(3), F.A.C.; Applicant request]
5. Clinker Storage Silos No. 3 Process Rate Limitation: The maximum loading rate of this silo shall not exceed 93 tons per hour. [Rules 62-4.070(3) F.A.C.; Applicant request]
6. Raw Materials Pre-mix Bin Process Rate Limitation: The maximum loading rate of raw materials to the Raw Materials Pre-Mix Bins and material handling system shall not exceed 330 tons per hour (daily average dry basis). [Rule 62-4.070(3) F.A.C.; Applicant request]
7. Additive Material Storage Bin Process Rate Limitation: The maximum loading rate of the Additive Material Storage Bin shall not exceed 36 tons per hour. [Rule 62-4.070(3) F.A.C.; Applicant request]
8. Cement Bag Loadout System Hours of Operation: The operation time for this system shall not exceed 7400 hours per year. [Rule 62-4.070(3) F.A.C.; Applicant request]

EMISSIONS AND TESTING REQUIREMENTS

9. Particulate Matter (PM/PM_{10}) and Visible Emissions Limits Cement Bag Loadout System:

   This permit does not establish any new emissions standards or testing requirements except to change the annual emissions limit for Emissions Unit 026, Cement Bag Loadout System, given in existing permits from 1.87 to 2.22 tons per year. The presently applicable visible emissions testing requirements in lieu of stack testing continue to apply. [Permit AC27-185904; Rule 62-297.620(4), F.A.C.; Applicant Request]

10. Particulate Matter and Visible Emissions Limits for Finish Mills 1 and 2 (baghouse G-23):

    PM/PM_{10} emissions for the Finish Mill 1 and 2 (baghouse G-23) shall not exceed 9 lb/hr and 39.4 tons per year (each). Visible emissions shall not exceed 10 % opacity.

11. Testing Requirements: The finish mills 1 and 2 (baghouse G-23) shall be stack tested by September 30, 2007 to demonstrate initial compliance with the applicable emission standards for PM/PM_{10} and visible emissions. Thereafter, compliance with the PM/PM_{10} limits shall be demonstrated during each federal fiscal year (October 1st to September 30th). After conducting the initial stack test, the applicant may request a revision of the visible emissions standard to 5% opacity and rely on adherence to that standard in lieu of annual stack test demonstrations. [Rules 62-297.310(7)(c) and 62-297.620(4), F.A.C.]

12. Test Methods: Any required tests shall be performed in accordance with the following reference methods and the applicable requirements of Appendix SC (Standard Conditions) of this permit, and the applicable NESHAP provisions.

Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Matter from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

ADDITIONAL REPORTING AND RECORD KEEPING

13. Baghouse O&M Plan: For each baghouse the permittee shall maintain an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Compliance Authority prior to any compliance tests for this unit. [Rule 62-4.070(3), and 40 CFR 63.1350, Subpart LLL]

14. Test Reports: For each test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. [Rules 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX GC

GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

   a. Have access to and copy and records that must be kept under the conditions of the permit;
   b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
   c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

   Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

   a. A description of and cause of non-compliance; and

   b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

   The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida

Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

    a. Determination of Best Available Control Technology ( );
    b. Determination of Prevention of Significant Deterioration ( );
    c. Compliance with National Emission Standards for Hazardous Air Pollutants ( ); and
    d. Compliance with New Source Performance Standards ( ).

14. The permittee shall comply with the following:

    a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

    b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

    c. Records of monitoring information shall include:

        1) The date, exact place, and time of sampling or measurements;
        2) The person responsible for performing the sampling or measurements;
        3) The dates analyses were performed;
        4) The person responsible for performing the analyses;
        5) The analytical techniques or methods used; and
        6) The results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

STANDARD CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at this facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]

3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permitee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]

6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and62-210.200(203), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]

9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]

11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]

12. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

    a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

    b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

    c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

    [Rule 62-297.310(4), F.A.C.]

14. Determination of Process Variables

    a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

    b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

    [Rule 62-297.310(5), F.A.C.]

15. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

16. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

17. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

    1) The type, location, and designation of the emissions unit tested.

2) The facility at which the emissions unit is located.
3) The owner or operator of the emissions unit.
4) The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5) The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6) The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7) A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8) The date, starting time and duration of each sampling run.
9) The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10) The number of points sampled and configuration and location of the sampling plane.
11) For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12) The type, manufacturer and configuration of the sampling equipment used.
13) Data related to the required calibration of the test equipment.
14) Data on the identification, processing and weights of all filters used.
15) Data on the types and amounts of any chemical solutions used.
16) Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17) The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18) All measured and calculated data required to be determined by each applicable test procedure for each run.
19) The detailed calculations for one run that relate the collected data to the calculated emission rate.
20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

RECORDS AND REPORTS

18. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]

19. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.

Harvey, Mary

From: Harvey, Mary

Sent: Friday, August 03, 2007 10:32 AM

To: 'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'

Cc: Adams, Patty; Heron, Teresa; Gibson, Victoria

Subject: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Attachments: CEMEX PROJECT - 0530010-018-AC-DRAFT.zip

Tracking:

Recipient	Read
'michaelanthony.gonzales@cemexusa.com'	
'charles.walz@cemexusa.com'	
'amarjits.gill@cemexusa.com'	
Nasca, Mara	Read: 8/3/2007 10:37 AM
'jkoogler@kooglerassociates.com'	
'fbergen@kooglerassociates.com'	
'gkuhl@hernandocounty.us'	
'sfernandez@ohfc.com'	
'Little.James@epamail.epa.gov'	
'Forney.Kathleen@epamail.epa.gov'	
Adams, Patty	Read: 8/6/2007 5:01 PM
Heron, Teresa	Read: 8/3/2007 10:51 AM
Gibson, Victoria	Read: 8/3/2007 10:36 AM

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Harvey, Mary

From: Heron, Teresa
To: Harvey, Mary
Sent: Friday, August 03, 2007 10:51 AM
Subject: Read: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject:	CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT
Sent:	8/3/2007 10:32 AM

was read on 8/3/2007 10:51 AM.

Harvey, Mary

From: Forney.Kathleen@epamail.epa.gov
Sent: Friday, August 03, 2007 2:26 PM
To: Harvey, Mary
Cc: Little.James@epamail.epa.gov
Subject: Re: FW: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Thanks. We got the files.
katy

Katy R. Forney
Air Permits Section
EPA - Region 4
61 Forsyth St., SW
Atlanta, GA 30024

Phone: 404-562-9130
Fax: 404-562-9019

"Harvey, Mary" <Mary.Harvey@dep.state.fl.us> 08/03/2007 02:25 PM

To: Kathleen Forney/R4/USEPA/US@EPA, James Little/R4/USEPA/US@EPA
cc:
Subject: FW: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Thanks and have a good weekend.

Mary

From: Harvey, Mary
Sent: Friday, August 03, 2007 10:32 AM
To: 'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc: Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting

Harvey, Mary

From: Gibson, Victoria
To: Harvey, Mary
Sent: Friday, August 03, 2007 10:36 AM
Subject: Read: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject:	CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT
Sent:	8/3/2007 10:32 AM

was read on 8/3/2007 10:36 AM.

Harvey, Mary

From: Nasca, Mara
To: Harvey, Mary
Sent: Friday, August 03, 2007 10:37 AM
Subject: Read: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject:	CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT
Sent:	8/3/2007 10:32 AM

was read on 8/3/2007 10:37 AM.

Harvey, Mary

From: Adams, Patty
To: Harvey, Mary
Sent: Monday, August 06, 2007 5:01 PM
Subject: Read: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Your message

To:	'michaelanthony.gonzales@cemexusa.com'; 'charles.walz@cemexusa.com'; 'amarjits.gill@cemexusa.com'; Nasca, Mara; 'jkoogler@kooglerassociates.com'; 'fbergen@kooglerassociates.com'; 'gkuhl@hernandocounty.us'; 'sfernandez@ohfc.com'; 'Little.James@epamail.epa.gov'; 'Forney.Kathleen@epamail.epa.gov'
Cc:	Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject:	CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT
Sent:	8/3/2007 10:32 AM

was read on 8/6/2007 5:01 PM.

Harvey, Mary

From: Gary Kuhl [GKuhl@co.hernando.fl.us]
To: Harvey, Mary
Sent: Tuesday, August 07, 2007 8:40 AM
Subject: Read: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Your message

To: GKuhl@co.hernando.fl.us
Subject:

was read on 8/7/2007 8:40 AM.

Harvey, Mary

From: John Koogler [jkoogler@kooglerassociates.com]
Sent: Friday, August 03, 2007 11:50 AM
To: Harvey, Mary
Subject: RE: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Thank you

John B Koogler
Koogler & Associates, Inc
4014 NW 13th St
Gainesville, Fl 32609
352/377-5822
jkoogler@kooglerassociates.com

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]
Sent: Friday, August 03, 2007 10:32 AM
To: michaelanthony.gonzales@cemexusa.com; charles.walz@cemexusa.com; amarjits.gill@cemexusa.com; Nasca, Mara; jkoogler@kooglerassociates.com; fbergen@kooglerassociates.com; gkuhl@hernandocounty.us; sfernandez@ohfc.com; Little.James@epamail.epa.gov; Forney.Kathleen@epamail.epa.gov
Cc: Adams, Patty; Heron, Teresa; Gibson, Victoria
Subject: CEMEX CEMENT, INC. - PROJECT #0530010-018-AC-DRAFT

Dear Sir/Madam:

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The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site:
http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Harvey, Mary

From: Heron, Teresa
Sent: Thursday, August 02, 2007 2:13 PM
To: Harvey, Mary
Cc: Adams, Patty
Subject: CEMEX Project 018
Follow Up Flag: Follow up
Flag Status: Red
Attachments: 018APP.pdf; 018COVER.pdf; 018INTENT.pdf; 018NOTICE.pdf; 018TECHNICAL.pdf; 018DPERMIT.pdf

To be mailed out tomorrow August 3.

Thanks,
Teresa Heron, Engineer
Permitting South Section
Bureau of Air Regulation
Phone 850/921-9529
teresa.heron@dep.state.fl.us

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20

September 14, 2007

Teri Donaldson, Esquire
Office of General Counsel
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: 2nd Motion for Extension of Time to File a Petition
CEMEX Cement, Inc.
Brooksville Cement Plant, Hernando County
DEP File No. 0530010-018-AC

Dear Ms. Donaldson:

Attached is a second request for an extension of time to file for a hearing in accordance with Rule 28-106, FAC. CEMEX Cement, Inc. (CEMEX) is requesting additional time to work out an issue of concern (thallium sampling) in the draft construction permit. Mr. Al Linero, the permitting engineer, has been notified of this request.

If you have any questions concerning this request, please do not hesitate to contact me.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

Fawn W. Bergen, P.E.

FWB
Encl.

C: T. Heron, FDEP
A. Linero, FDEP
C. Walz, CEMEX

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application
for Air Permit by

CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

FDEP File No. 0530010-018-AC

MOTION FOR EXTENSION OF TIME

The Applicant, CEMEX Cement, Inc., by and through its undersigned Engineer of Record and pursuant to Rule 28-106, FAC, requests the Secretary of FDEP to grant a 60-day extension of time in which to file a petition. This will allow additional time to resolve an issue of concern with the FDEP.

Dated the 14th day of September, 2007, in Gainesville, Alachua County, Florida.

Koogler & Associates, Inc.
Environmental Services

Fawn W. Bergen, P.E.
Engineer of Record
Florida Registration No. 61614
4014 N.W. 13th Street
Gainesville, FL 32609
(352) 377-5822

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been furnished to Teri Donaldson, Office of the General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 by FAX and UPS; and Mr. Al Linero and Ms. Teresa Heron, FDEP, 2600 Blair Stone Road, Tallahassee, Florida 32399, Mr. Charles Walz, CEMEX Cement, Inc., 16301 Ponce De Leon Boulevard, Brooksville, Florida 34614, by email and by US mail, this 14th day of September, 2007.

Fawn W. Bergen, P.E.
Florida Registration No. 61614

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20

August 16, 2007

Teri Donaldson, Esquire
Office of General Counsel
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Motion for Extension of Time to File a Petition
CEMEX Cement, Inc.
Brooksville Cement Plant, Hernando County
DEP File No. 0530010-018-AC

Dear Ms. Donaldson:

Attached is a request for an extension of time to file for a hearing in accordance with Rule 28-106, FAC. CEMEX Cement, Inc. (CEMEX) is requesting additional time to work out an issue of concern (thallium sampling) in the draft construction permit. Mr. Al Linero, the permitting engineer, has been notified of this request.

If you have any questions concerning this request, please do not hesitate to contact me.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

Fawn W. Bergen, P.E.

FWB
Encl.

C: T. Heron, FDEP
A. Linero, FDEP
C. Walz, CEMEX

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the Matter of an Application
for Air Permit by

CEMEX Cement, Inc.
16301 Ponce De Leon Boulevard
Brooksville, Florida 34614-0849

FDEP File No. 0530010-018-AC

MOTION FOR EXTENSION OF TIME

The Applicant, CEMEX Cement, Inc., by and through its undersigned Engineer of Record and pursuant to Rule 28-106, FAC, requests the Secretary of FDEP to grant a 60-day extension of time in which to file a petition. This will allow additional time to resolve an issue of concern with the FDEP.

Dated the 16th day of August, 2007, in Gainesville, Alachua County, Florida.

Koogler & Associates, Inc.
Environmental Services

Fawn W. Bergen, P.E.
Engineer of Record
Florida Registration No. 61614
4014 N.W. 13th Street
Gainesville, FL 32609
(352) 377-5822

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing has been furnished to Teri Donaldson, Office of the General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 by FAX and UPS; and Mr. Al Linero and Ms. Teresa Heron, FDEP, 2600 Blair Stone Road, Tallahassee, Florida 32399, Mr. Charles Walz, CEMEX Cement, Inc., 16301 Ponce De Leon Boulevard, Brooksville, Florida 34614, by email and by US mail, this 16th day of August, 2007.

Fawn W. Bergen, P.E.
Florida Registration No. 61614

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20
July 25, 2007

Via Email & USPS

Mr. A. L. Linero, P.E.
FDEP
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Waiver of 90-day Period
CEMEX Cement, Inc.
Brooksville Cement Plant
FDEP File No. 0530010-018-AC

Dear Mr. Linero:

This is a follow up to our telephone conversation regarding a waiver of the 90-day period for the above referenced project until August 8, 2007.

If you have any questions, please call me.

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK/lt

Encl.

cc: Teresa Heron, FDEP
Charles Walz, CEMEX

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WAIVER OF 90 DAY TIME LIMIT FOR ISSUANCE OF PERMIT
UNDER SECTIONS 120.60(1) and 403.0876, FLORIDA STATUES

Applicant: CEMEX Cement, Inc. – Brooksville Cement Plant

FDEP File No.: 0530010-018-AC

The undersigned has read Sections 120.60(1) and 403.0876, Florida Statutes (F.S.), and fully understands the applicant's rights under those sections.

With regard to the above referenced permit application, the applicant hereby, with full knowledge and understanding of its rights under Sections 120.60(1) and 403.0876, F.S., waives the right under those statutes to have the application for a permit issued or denied by the State of Florida Department of Environmental Protection within the ninety day time period prescribed in those sections. Said waiver is made freely and voluntarily by the applicant, is in its self-interest, and is made without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on August 8, 2007.

The undersigned is authorized to make this waiver on behalf of the applicant.

07/25/07
Signature/Date

John B. Koogler, Ph.D., P.E.
Name/Title (please print)

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20
July 26, 2007

Via Email and USPS

Mr. A. L. Linero, P.E.
FDEP
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Cemex Cement, Inc.
Brooksville Cement Plant
Clarification Related to FDEP File No. 0530010-018-AC

Dear Al,

The purpose of this letter is to clarify the matter we discussed on July 25, 2007 regarding past actual and future potential emissions from the No. 1 and No. 2 Finish Mill at the CEMEX Brooksville Cement Plant as it applies to the above referenced file.

In the application for the above referenced air construction permit, two of the issues addressed were related to Finish Mills No. 1 and No. 2. One of the requests was to increase the hourly transfer rate for the two mills combined from 98 tons per hour (daily average) to 105 tons per hour (daily average) to make the transfer rate to the mills consistent with operating rates of other equipment in the plant.

The second request related to the mills was to reduce the permitted particulate matter emission rate from 36 pounds per hour and 157.7 tons per year for the two mills combined (equivalent to 18 pounds per hour and 78.8 tons per year, each mill) to 9 pounds per hour and 39.4 tons per year for each mill. It should be noted that the two mills operate independent of one another and particulate matter emissions from each mill are controlled by a baghouse dedicated to that mill.

The permitted particulate matter emission rate from the two mills combined (36 pounds per hour and 157.7 tons per year) relates back to the process weight table which was used to establish the allowable particulate matter emission rate from the two mills when they are originally permitted in the mid-1970s. The intent of CEMEX is to reduce the permitted particulate matter emission rate from the two mills and to assign a particulate matter emission limit to each mill rather than having a combined particulate matter emission limit for the two mills combined.

In reducing the permitted particulate matter emissions from 36 pounds per hour and 157.7 tons per year, both mills combined, to 9 pounds per hour and 39.4 tons per year, each mill, no physical change or change in the method of operation will be made to either mill. Hence, for permitting purposes, there will be no net change in actual particulate matter emissions from the two mills.

I hope that this satisfactorily addresses the questions related to these two mills. If there are further questions or comments, do not hesitate to contact me at 352-377-5822 or by email at jkoogler@kooglerassociates.com .

Very truly yours,

KOOGLER & ASSOCIATES

John B. Koogler, Ph.D., P.E.

JBK/lt

cc: Teresa Heron, FDEP
Charlie Walz, Cemex

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES
4014 NW 13th STREET
GAINESVILLE, FL 32609-1923
352/377-5822 ▪ FAX/377-7158

KA 521-06-20

July 11, 2007

Mr. A. L. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Waiver of 90-day Period
CEMEX Cement Inc.- Brooksville Cement Plant
Hernando County, Florida
FDEP File No. 0530010-018-AC

Dear Mr. Linero:

This is a follow up to your meeting with Dr. John Koogler regarding a waiver of the 90-day period for the above referenced project until July 25, 2007 (14 days).

If you have any questions, please call me.

Very truly yours,

KOOGLER & ASSOCIATES

Fawn Bergen, P.E.

Encl.

C: C. Walz, CEMEX

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WAIVER OF 90 DAY TIME LIMIT FOR ISSUANCE OF PERMIT
UNDER SECTIONS 120.60(1) and 403.0876, FLORIDA STATUES

Applicant: CEMEX Cement, Inc. – Brooksville Cement Plant

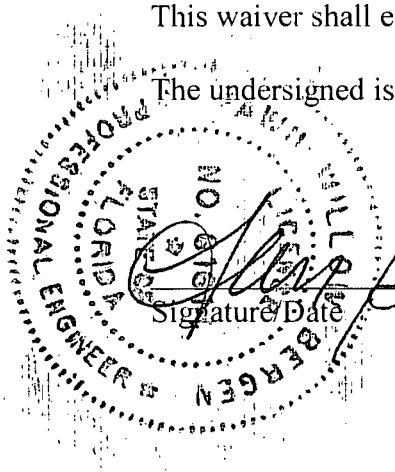
DEP File No.: 0530010-018-AC

The undersigned has read Sections 120.60(1) and 403.0876, Florida Statutes (F.S.), and fully understands the applicant's rights under those sections.

With regard to the above referenced permit application, the applicant hereby, with full knowledge and understanding of its rights under Sections 120.60(1) and 403.0876, F.S., waives the right under those statutes to have the application for a permit issued or denied by the State of Florida Department of Environmental Protection within the ninety day time period proscribed in those sections. Said waiver is made freely and voluntarily by the applicant, is in its self-interest, and is made without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Protection.

This waiver shall expire on July 25, 2007.

The undersigned is authorized to make this waiver on behalf of the applicant.



Signature/Date 7/11/07

Fawn Bergen, P.E., Project Engineer
Name/Title (please print)

KOOGLER & ASSOCIATES, INC.
ENVIRONMENTAL SERVICES

KOOGLER & ASSOCIATES
ENVIRONMENTAL SERVICES
4014 NW THIRTEENTH STREET
GAINESVILLE, FLORIDA 32609
352/377-5822 ▪ FAX/377-7158

KA 521-05-11
August 15, 2006

Via Email and USPS

Ms. Trina Vielhauer
FDEP-Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RE: Cemex Cement, Inc.
Brooksville Cement Plant
Expedited Permitting of Indirect Firing Systems for Kilns No. 1 and 2 and
FDEP File Nos. 0530010-018 and 019-AC

Dear Trina:

I'd like to express our appreciation to you, Al Linero, and Cindy Mulkey for meeting with us on such short notice on August 9, 2006 to discuss the above captioned matters. By this letter, I would like to state our understanding of matters we discussed related to the expedited permitting of indirect firing systems for Kiln No. 1 and Kiln No. 2 and related to pending air construction permit applications in FDEP Files 0530010-018 and 019-AC.

PERMITTING OF INDIRECT FIRING SYSTEMS

It is our understanding that Cemex is to provide a new and separate air construction permit application for the indirect firing system project. It is our goal to have this application in your hands on or before August 18, 2006.

In this application, we understand that we are to address the following issues:

- A review of production records – Cemex is to review clinker production records for Kiln No. 1 and Kiln No. 2 for the past 10 years. The maximum production rates for consecutive 24-month periods will be used to establish a production rate

baseline for each of the two kilns. These baseline rates plus a demand increase will be used to establish production limits that demonstrate the indirect firing systems will not increase kiln production rates.

- Emission limits – The indirect firing systems are expected to reduce NOx emissions from the two kilns and are not expected to affect the emission rates of other pollutants. Documentation of this statement will be provided in the application. As a result of there being no change in emissions, the indirect firing system project will be a non-PSD project. The emission limits that will be proposed in the indirect firing systems application for the two kilns are those that are currently permitted. The limits that have been requested in the air construction permit application assigned FDEP File No. 0530010-018-AC will continue to be addressed in the review of that application.
- Fuel use – It is expected that the indirect firing system will reduce the specific heat of production (BTU per ton of clinker). As a result, the installation of the indirect firing system should result in a reduction in fuel consumption in each of the two kilns. This matter will be addressed in the permit application.
- Indirect firing system burners – The Pillard Rotoflam® burners that were installed in Kiln No. 1 and Kiln No. 2 as part of the semi-direct firing system addressed in the air construction permit application assigned FDEP File No. 0530010-018-AC will be used for the indirect firing system. These burners will not be changed to accommodate the indirect firing system; only the delivery of fuel and combustion air to the burners will change. Because of this, it is our understanding that the permitting of the burners themselves will be addressed in the indirect firing systems application review. In the following section of this letter, Cemex will request that the permitting of the semi-direct firing system, including the burners, be withdrawn from the 0530010-018-AC application when the new application is received.

- Indirect firing project description – The general concept of indirect firing will be described including the lowering of emissions (NOx), the improvement in fuel efficiency, and the overall improvement in combustion control.
- Time-line for permit application review – During the meeting we discussed the optimal time-line for the review of the application. It was stated that the Department would require 30 days for the initial review and the preparation of a Request for Additional Information; if necessary. Following this would be another 30-day period to review any additional information and prepare a draft permit. Following this would be a 14-day period for public comment and an additional seven days to prepare the final permit. The total time in this time-line, including a few days for slippage, is approximately 90 days. We greatly appreciate the Department's willingness to work toward such a time-line and we will certainly do our part to make this time-line a reality.

FDEP FILES 0530010-018 AND 019-AC

File 0530010-018-AC (referred to henceforth as File 018) included four major projects plus several record keeping, rate changes and operating time changes to existing permit conditions for several emission units at the Brooksville Cement Plant. File 0530010-019-AC (referred to henceforth as File 019) included an air construction permit application submitted to the Department's Southwest District Office in Tampa for the after-the-fact permitting for damper modifications made to the Kiln No. 1 system.

File 018

The four major projects included in this application were the use of petroleum coke on a continuing basis in Kiln No. 1 and Kiln No. 2, the use of Tire Derived Fuel on a continuing basis in Kiln No. 2, the after-the-fact permitting of SNCR systems on Kiln No. 1 and Kiln No. 2 and the after-the-fact permitting of semi-direct firing systems on Kiln No. 1 and Kiln No. 2.

By this letter, we are requesting that the use of Tire Derived Fuel on a continuing basis in Kiln No. 2 be withdrawn from this file. The Department is in the process of issuing an air construction permit 0530010-022-AC that will authorize a trial period for firing Tire Derived Fuel in Kiln No. 2. The purpose of the trial period is to evaluate the efficacy of using Tire Derived Fuel in Kiln No. 2 and to develop real-time emission data while this fuel is being fired. It is the intent of Cemex to file a separate and new air construction permit for the use of Tire Derived Fuel on a continuing basis in Kiln No. 2 at the end of the trial period. This application will most likely be submitted in September-October 2007.

By this letter, Cemex is also withdrawing the request to use petroleum coke in Kiln No. 1 and Kiln No. 2 on a continuing basis. Cemex previously notified the Department that it was withdrawing the request to evaluate petroleum coke during the trial period that will be authorized by Permit 0530010-022-AC. The use of petroleum coke at the Brooksville Cement Plant has been put on temporary hold. At such time that Cemex decides to move forward with the use of petroleum coke, the Department will be notified and a new and separate permit application will be filed.

It is the intent of Cemex that the Department continues with the permitting of the SNCR systems for Kiln No. 1 and Kiln No. 2 as addressed in File 018. No changes have been made that will affect the permitting of these systems.

File 018 also included the after-the-fact permitting of semi-direct firing systems on Kiln No. 1 and Kiln No. 2; including the installation of Pillard Rotoflam® burners on both kilns. As stated in the preceding section, Cemex will replace the semi-direct firing systems with indirect firing systems, to be addressed in a new and separate permit application. Therefore, Cemex requests that at the time the application for the indirect

firing systems is received, the review of the semi-direct firing system, including the burner installation, be discontinued as part of File 018.

The air construction permit application in File 018 included several changes to existing permit conditions for various emission units. These changes were related to testing and record keeping, loading rate changes for bins and silos, and a change in hours of operation for the cement bag load out system. Specifically, the changes requested were:

- Cement Kiln No. 1—remove the requirement to perform daily sampling and recording of thallium concentrations in the baghouse dust;

- Cement Kiln No. 1 and No. 2—Change the requirement for liquid fuel records to be based on analysis of a sample representative of the shipment to be based on supplier's records;
- Finish Mills No. 1 and No. 2—Increase the maximum transfer rate to 105 TPH and limit the PM emissions from each mill to 9.0 lb/hr each, rather than 36 lb/hr combined and limit annual PM emissions to 39.4 TPY each kiln, rather than 157.7 TPY combined;
- Clinker Storage Silo Nos. 1 and 2—Increase the maximum silo loading rate to 93 TPH;
- Clinker Silo No. 3—Increase the maximum silo loading rate to 93 TPH;
- Raw Material Storage Silos & Feed System—Increase the maximum transfer rate to 330 TPH daily average (dry basis);
- Raw Material Pre-Mix Bin— Increase the maximum transfer rate to 330 TPH daily average (dry basis);
- Additive Material Storage Bin—Increase the maximum material transfer rate to 36 TPH; and

- Cement Bag Loadout System—Increase the maximum operating hours to 7,400 hours per year.

Cemex requests that the Department continue to process these requested permit condition changes.

Regarding the changes in the Finish Mills No. 1 and No. 2 conditions, Cemex requested a change in the material transfer rates for Finish Mills No. 1 and No. 2 and also requested a change in the particulate matter emission limits for the mills. Cemex requests that the Department continue with the processing of the transfer rate change as addressed in the application.

Regarding the particulate matter emission limits for Finish Mills No. 1 and No. 2, Cemex is requesting that the current particulate matter emission limit for the finish mills of 36 pounds per hour and 157.7 tons per year, for the two mills combined, be changed as follows:

- Hourly - 9.0 pounds PM per hour, each mill; and
- Annual - 39.4 tons PM per year, each mill.

These changes are consistent with the information previously provided to the Department in File 018. The changes will result in a reduction in permitted PM emissions of 78.9 tons per year.

File 019

It is our understanding that the after-the-fact permitting of the damper changes in the Kiln No. 1 system will be incorporated in the air construction permit that will be issued pursuant to File 018. Cemex requests that the Department proceed with the combining of these projects as suggested by the Department.

SUMMARY

This summarizes our understanding of matters related to the expedited permitting of the indirect firing systems and the changes to projects associated with Files 018 and 019. If any of our understandings are not consistent with the understandings of the Department, please let us know as soon as possible so that these matters can be resolved.

Again, we appreciate the time that you, Al Linero, and Cindy Mulkey spent with us and the time that you have already spent on the permitting of the pending projects addressed herein.

Very truly yours,

KOOGLER & ASSOCIATES, INC.

John B. Koogler, Ph.D., P.E.

JBK/lt

cc: Mr. Al Linero
Ms. Cindy Mulkey
Mr. Dan Merz
Mr. Jeet Gill
Mr. Mike Gonzales
Mr. Charlie Walz

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Jeb Bush
Governor

Colleen M. Castille
Secretary

March 31, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael A. Gonzoles
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Re: DEP File 0530010-018-AC, PSD-FL-362
SNCR, Burners CEMEX Brooksville Plant

The Department received your permit application on October 14th and key meteorological and modeling information on October 18. The Department requested additional information on November 14. A response to this request was received on March 3, 2006 from Koogler & Associates for CEMEX.

The original application (0530010-018-AC) is to conduct various projects at the CEMEX Brooksville Plant including use of up to 100% petroleum coke (petcoke) as a fuel in Kilns 1 and 2; use of tire-derived fuel (TDF) in both kilns; installation of new kiln burners; installation of an ammonia injection system in the lower preheater of each kiln; and increase transfer/production rates for various emissions units. The Department has determined that the application is incomplete with respect to the requested projects.

The Department requests submittal of additional information in order to continue processing your application pursuant to Rule 62-4.055, F.A.C., Permit Processing, and the Standards of Issuing or Denying permits at Rule 62-4.070, F.A.C. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

The following information is required to complete the application:

1. In your response to our request for information you described work completed to convert the system from direct to semi-direct firing. However, CEMEX has indicated in an attachment to a subsequent application and during phone conversations with department staff that the system will be converted from semi-direct to indirect firing. Please describe any work that will be conducted with respect to this change, and any expected impacts this change will have on NO_X and CO. Also submit updates to the appropriate application pages for this change if actually planned. Is this conversion planned for both kilns?
2. The Department requested that you provide continuous emission monitoring system data for both kilns on an hour-by-hour basis including ammonia injection rates, process data, as well as the parameters needed to calculate CO and NO_X emissions in lb/ton of feed or lb/ton of clinker. The CEMS data provided included only CO and NO_X concentrations data, ammonia injection rate, and kiln feed rate. Please provide (in electronic format) the parameters needed to calculate CO

and NOx emission rates in lb/ton of feed or lb/ton of clinker for each hour as previously requested.

3. According to CEMEX's response to the Department's recent request for information, stack gas NO_X concentrations were established at compliance NO_X emission rates for various kiln feed rates. An ammonia injection rate necessary to stay below the predetermined stack gas NO_X compliance concentration is maintained by the operator. At what kiln feed rates were these NO_X concentrations established and what are the corresponding NO_X concentrations?

4. The Department has detected a discrepancy between section 2.1.2 Finish Mills Nos. 1 and 2 (page 4), and Table 3 (page 20) of the Report in Support of the Application for a PSD Construction Permit Review. Page 4 of the report indicates that CEMEX is requesting to split the PM limit for Finish Mills 1 and 2 to 78.9 TPY of PM for <u>each</u> finish mill. In Table 3, the Future Potential for Finish Mills 1 and 2 appear to be listed as 78.8 TPY for <u>both</u> mills. Please clarify and make the necessary adjustments. If Table 3 is incorrect, the *Total Net Change Due to Project* will need to be reassessed for PM.

5. We understand that the Kiln 1 existing tire delivery and injection system was modified. Please provide the historical maximum sustained tire feed rate achieved prior to modification and that achieved since the upgrade of the system.

6. How are the changes in the tire delivery and injection system expected to impact CO emissions given the absence of tertiary air and the bulky nature of the tires?

7. We consider it important to promptly calibrate the CO and NO_X CEMS to insure the data submitted in support of this application is accurate.

8. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to any such violations. This question was included in the Department's first request for additional information. According to Koogler's response dated March 1st, this information is to be provided in a separate document. To date, the Department has not received the requested information.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

Permit applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days. Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application.

If you have any questions regarding this matter, please call me at 850/921-9523.

Sincerely,

A. A. Linero, P.E.
Program Administrator
South Permitting Section

Cc: Charles Walz, CEMEX
Fawn Bergen, P.E., Koogler
Mara Nasca, DEP SWD

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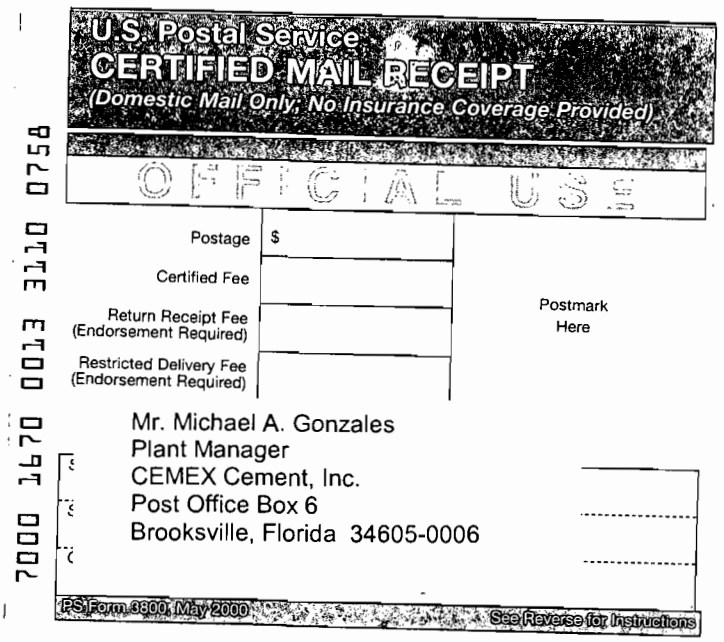

Department of
Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Jeb Bush
Governor

Colleen M. Castille
Secretary

November 15, 2005

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael A. Gonzoles
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

Re: DEP File 0530010-018-AC, PSD-FL-362
Projects at CEMEX Brooksville Plant

The Department received your permit application on October 14th and key meteorological and modeling information on October 18. The application is to conduct various projects at the CEMEX Brooksville Plant. The requests include:

- Use of up to 100% petroleum coke (petcoke) as a fuel in Kilns 1 and 2;
- Use of tire-derived fuel (TDF) in both kilns;
- Installation of new kiln burners;
- Installation of an ammonia injection system in the lower preheater of each kiln; and
- Increase transfer/production rates for various emissions units.

The Department has determined that the application is incomplete. This letter is a request for additional information (RAI) in accordance with Rule 62-4.055, F.A.C. and the Standards of Issuing or Denying permits at Rule 62-4.070, F.A.C.

According to the rule, the applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department. Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application.

In order to continue processing your application, the department will need the additional information requested below. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

The following information is required to complete the application:

1. Please describe any work conducted or that will be conducted with respect to the burning of 100% petcoke. Describe the work items conducted that were excluded from Pillard's quotation submitted as Attachment 1. This includes work to convert the system from direct to semi-direct firing.
2. Describe how 100% petcoke can be used given the lack of volatile fraction to support combustion and flame.
3. Provide the procedures for receiving and storing petcoke as well as controlling dust from handling. Provide procedures related to groundwater protection.
4. Are the coal mills capable of grinding petcoke to the specifications needed and to supply a 100% petcoke fuel stream for the two kilns?
5. Petcoke contains more sulfur than coal contains. With the low alkali levels in the native limestone, how will CEMEX compensate with the greater alkali requirements inherent in burning petcoke? Will it be necessary for CEMEX to use even more of the 16% LOI fly ash and less bauxite or sand or clay?
6. Please provide information on the effects of additional vanadium and nickel found in petcoke upon the formation of sulfuric acid mist.
7. Please describe any work conducted or that will be conducted with respect to burning TDF. This should include any modifications made or to be made to the existing tire burning system on Kiln 1 and the proposed system on Kiln 2. Describe the handling and feeding system.
8. Given the lack of a tertiary air duct, how will CEMEX insure that sufficient air will be available in the area of the kiln riser to insure proper combustion of TDF and burn out of CO?
9. Describe the combustion zone within the riser and lower preheater including the residence time to insure maximum burnout of CO.
10. Please describe CEMEX experience using the 16% LOI fly ash described on Page 50 with respect to CO emissions. Has CEMEX been able to use this fly ash and comply with the present CO limit of approximately 2 lb/ton clinker and the dioxin/furan limits of 0.2 ng/dscm (or 0.4 ng/dscm)?
11. How will burning TDF and petcoke affect the heat balance as well as conditions related to dioxin formation and control?
12. Provide continuous emission monitoring system (CEMS) data from the recently installed systems for both kilns on an hour-by-hour basis. Include ammonia injection rates and process data as well as the parameters needed to calculate CO and NO_X emissions in terms of lb/ton of feed or lb/ton of clinker.
13. Please provide the certification documentation for the recently installed CEMS.
14. If the CEMS have not yet been calibrated, please detail how the amount of ammonia necessary to maintain compliance with the NO_X is determined ?

15. Provide information from other CEMEX projects where petcoke or TDF have been used and summarize the resulting emission changes.
16. Provide information showing what the effects of ammonia injection (SNCR) have been to-date on emissions of CO. It is possible to separate the effects of SNCR on CO from the effects of petcoke, TDF, and 16% LOI fly ash. This is needed to allow a thorough BACT analysis.
17. Please provide a summary for the past two years of the required daily sampling and recording of baghouse dust thallium concentration described in Condition B.20 of the facility Title V Operation Permit.
18. Does CEMEX waste baghouse dust in general or to meet the mentioned thallium requirements in particular?
19. Where is the dust stored or where is it disposed or sold?
20. Has CEMEX or its affiliates had any violations (or warning letters) related to any Department or EPA regulations at any of their facilities in Florida and the United States? Have officers of CEMEX also been officers of other companies that have had violations (or warning letters) of Department regulations at any facilities? Please provide all documentation in relation to any such violations.
21. The coordinates in the application for Kiln 1 and Kiln 2 are 356250 m E, 3168370 m N and 356300 m E, 3168380 m N respectively. In the modeling for Kiln 1 and Kiln 2, 356007 m E. 3169248 m N and 356052 m E, 3169261 m N is used. Please verify which coordinates are correct. If the modeling coordinates are incorrect, please update the modeling.

Basically, we need better descriptions of the petcoke and TDF projects besides the very basic descriptions provided. Please submit test protocols for trial tests using petcoke and TDF. This information is needed to determine the effects and develop procedures to minimize emissions increases such as for CO and evaluate the effects on other pollutants such as dioxin and VOC.

Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

If you have any questions regarding this matter, please call me at 850/921-9523.

Sincerely,

A. A. Linero, P.E.
Program Administrator
South Permitting Section

Cc: Fawn Bergen, P.E.
Mara Nasca, DEP SWD
Charles Walz, CEMEX

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Mr. Michael A. Gonzoles
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

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A. Signature
X Inge Parrish ☐ Agent ☐ Addressee

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C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

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☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (*Extra Fee*) ☐ Yes

2. Article Number (*Transfer from service label*) 7001 0320 0001 3692 4071

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Mr. Michael A. Gonzoles
Plant Manager
CEMEX Cement, Inc.
Post Office Box 6
Brooksville, Florida 34605-0006

PS Form 3800, June 2002 See Reverse for Instructions