FLORIDA ROCK INDUSTRIES INC
CEMENT GROUP / 4000 N.W. CR 235 / P.O. Box 459 / Newberry, FL 32669 / (352) 472-4722

April 8, 2001

Mr. C. H. Fancy, P.E., Chief
Bureau of Air Regulation
Florida Department of
Environmental Regulation
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Re: CEMS Data Summary - 30 Day Rolling Average NOx Emissions

Dear Mr. Fancy:

Enclosed, please find the CEMS data summaries requested in your letter dated March 22, 2002. The data summaries and graphs are for the months of July 1 through December 31,2001 and January 1 through March 31, 2002. The 30-day rolling average NOx Lbs./Ton of clinker emissions, for each day of the month, are reflected in the attached graphs. The CEMS data-handling program has been configured to produce two pages of data, from the original one page report, relevant to the gaseous emissions. Daily reports of each day of the month requested show the clinker production, mass emissions rates, and mass emissions per ton of clinker produced on one page and the air flows, gaseous concentrations, and temperatures on the second page.

The 30-day rolling averages are calculated by averaging the thirty days of, data that includes the previous twenty nine (29) days, plus the data for day of the report, to produce the rolling average. Day thirty (30) of the data set is replaced, each day; with the data for the day of the report and day two becomes day one of the new data set. This process is repeated each day to eventually move day thirty up to day one and out of the data set as new data is added, to produce a true thirty-day rolling average. The rolling average is a standard a function of the CEMS software, by WTC Environmental Monitoring & Process Control. The functions to calculate emissions per ton of clinker were added to the program configuration at the request of Florida Rock. This was done after the input of clinker production was added to the CEM system. Initially the CEMS software only calculated the NOx Lbs./Ton of clinker emissions, SO2 and THC were added later. Before these functions were added to the CEMS data handling software the rolling average NOx Lbs./Ton of clinker was manually tracked and is still manually tracked to check/verify CEMS data (see attached). July through August 2001 indicates no data for SO2 and THC Lbs./Ton of clinker as they were added in late August. Some of the CEMS data was lost for the latter part of August and the first of September due to the crash of the CEMS computer hard drive. However, the data prior to this event was recovered from a CEMS data back-up disk, after the hard drive was replaced.

The mass emission data for many days in the data set requested data was edited to remove zeros or invalid data resulting from the kiln being down. These data inputs were set to monitoring not required "MNR" which prevents zeros or falsely low or high data from being incorporated into data averages. During periods when the kiln was down with no fuel being fired all mass emissions were set to MNR. When fuel was being fired with no feed the emissions per ton of clinker were set to MNR. However, when only fuel oil is fired, for heat-up, the mass emissions data will summarize extremely low mass emissions for all parameters, which will falsely lower the emission averages. The CEMS data would be much more representative of actual operating conditions if the data averaging functions for all mass emissions, Lbs./Hour and Lbs./Ton of clinker, were automatically set to MNR when the clinker production is less than thirty tons per hour. By design the kiln feed system cannot operate at a rate that produces less that thirty tons/hour of clinker. The data would still be available for review and/or inclusion in the data averaging as fuel-firing conditions dictated.

Should you require additional information or have any questions or comments concerning the data provided, please contact me at (352) 472-4722.

Respectfully,

George Townsend

George Townsend
Environmental & Safety Manager

pc: Cary O. Cohrs, Vice President - Operations

File: CEMS Data Summary.doc

Kiln Stack NOx Emissions - Rolling Average Lb./Ton of Clinker Produced

Chart Day	Date	Maximun Permited Rates 149.9 TPH Calculated Daily Avg. Kiln Feed TPH	Maximun Permited Rates 95.8 TPH CEMS Average Clinker Production TPH	CEMS Daily Average NOx Emissions Lbs./Hour	CEMS Daily Average NOx Emission Lbs./Ton of Clinker	CEMS Report 30 Day Rolling Avg. NOx Emissions Lbs./Hour	CEMS Report 30 Day Rolling Avg. NOx Lbs./Ton of Clinker
30	3-Apr-02	149.63	85.29	218.93	2.48	214.78	2.67
29	2-Apr-02	152.84	87.12	233.95	2.63	213.45	2.65
28	1-Apr-02	160.04	91.22	250.64	2.77	212.08	2.50
27	31-Mar-02	123.42	70.35	214.05	3.04	208.23	2.62
26	30-Mar-02	156.70	89.32	247.91	2.78	206.41	2.59
25	29-Mar-02	166.54	94.93	282.16	2.97	203.33	2.55
24	28-Mar-02	164.72	93.89	279.29	2.97	198.28	2.52
23	27-Mar-02	151.51	86.36	253.18	2.93	195.34	2.48
22	26-Mar-02	158.16	90.15	236.29	2.63	192.96	2.45
21	25-Mar-02	144.72	82.49	214.24	2.83	191.02	2.43
20	24-Mar-02	127.00	72.39	180.98	2.77	188.27	2.40
19	23-Mar-02	126.72	72.23	194.51	2.69	186.51	2.38
18	22-Mar-02	149.25	85.07	229.29	2.71	185.93	2.36
17	21-Mar-02	163.32	93.09	214.60	2.32	184.55	2.34
16	20-Mar-02	161.93	92.30	240.92	2.67	184.15	2.33
15	19-Mar-02	167.79	95.64	235.53	2.47	177.16	2.32
14	18-Mar-02	164.07	93.52	249.36	2.67	176.43	2.34
13	17-Mar-02	160.89	91.71	244.67	2.67	175.54	2.34
12	16-Mar-02	164.26	93.63	243.10	2.59	173.74	2.34
11	15-Mar-02	165.19	94.16	255.37	2.73	172.28	2.33
10	14-Mar-02	88.00	50.16	143.97	3.09	173.43	2.25
9	13-Mar-02	0.00	0.00	0.00		173.75	2.22
8	12-Mar-02	146.89	83.73	202.75	2.41	175.55	2.22
7	11-Mar-02	124.82	71.15	148.70	2.84	172.19	2.24
6	10-Mar-02	134.91	76.90	176.92	2.30	175.35	2.20
5	9-Mar-02	133.16	75.90	189.75	2.50	173.97	2.21
4	8-Mar-02	154.12	87.85	225.56	2.58	174.03	2.19
3	7-Mar-02	152.42	86.88	225.56	2.44	175.56	2.18
2	6-Mar-02	165.68	94.44	193.08	2.05	141.38	2.19
1	5-Mar-02	133.61	76.16	165.37	2.11	141.85	2.19
					2.64		

pc: Cary Cohrs
Tom Messer

File: NOx Rolling Average.xls

Rolling Average NOx Emissions - Lbs./Ton of Clinker