GENERAL OFFICE: 155 East 21st Street / P.O. Box 4667 / Jacksonville, Florida 32201 / (904) 355-1781
FLORIDA ROCK INDUSTRIES INC Mining, Ready Mix Concrete and Construction Products

April 20, 2002

For discussion with Al Linero and staff only

Mr. Al Linero, P.E.
Bureau of Air Regulation
Department of Environmental Protection
State of Florida
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Re: Thompson S. Baker Cement Plant - Production and Emission Issues

Dear Mr. Linero:

Over the course of the last two years, we have brought to your attention various aberrations with respect to several of the units of measure, which found their way into the construction permit and subsequently into the Title V Operating Permit for subject plant. As the Title V permit language allows for certain modifications of some emission limits and as the Department is presently reviewing the final values applicable to this installation, we believe the opportunity should not be missed to deal with the inconsistencies in the body of the permit.

We request that the Department make certain changes to production rates and permitted emission limits, which more realistically portray the expectations and capabilities of the applicant/permit holder. We concur with the Department that plant operating experiences to date can lead to the reduction of some permitted emission limits of certain hazardous pollutants, primarily those addressed in Mr. Fancy's letter dated March 22, 2002, of which N0x is the most significant one.

We have provided the data and information requested in Mr. Fancy's letter and would like to make the following observations:

The TSB Cement Plant received its Title V Permit on January 1, 2002. Prior to its issuance the plant operated successfully under construction permit No.001087003AC-FL-228A. Separate reports for the operating periods comprising the 2nd half of 2001 and the 1.Quarter of 2002 are deemed to be representative of the operating conditions. The plant operated in compliance with the permit conditions.

In writing the construction and operating permits, the applicant and the Department relied on the applicant's information received from qualified equipment vendors and professional engineers. The applicant made purchase decisions for manufacturing and emission control components based on the suppliers' credible warrantees, visits to existing installations and conservative performance ratings. These values were reflected in the application for an air emission permit.

As an important part of the project development, the applicant made financial projections to demonstrate the viability of this significant investment. Florida Rock prefers to be accurate or err on the conservative side. A critical component of the projection is the plant's ability to produce the amount of saleable material contained in the proforma.

Given the limits stated in the permit, the production goals can not be met without violating certain restrictions, which we believe were not intended to be imposed by the Department.

Therefore, we seek to modify certain values contained in the permit, to reflect the past operating experiences and gain necessary flexibility in the interpretation of the production limits consistent with the plant's optimum capabilities, while maintaining or reducing the permitted air emission limits.

In support of the justification for the proposed restated production limits, the following explanations should be pertinent:

a) the preheater portion of the pyro processing system is greatly more efficient with respect to heat transfer and requires less fuel than was anticipated. At the permitted feed rate, the preheater under performs and does not operate under optimum conditions.

b) the ratio of fuel metered to the preheater relative to the main burner at the discharge end of the rotary kiln is inconsistent with the conservative design of the pyro processing system.

c) fuel consumption and potential emissions of pollutants expressed as pounds per unit produced are higher then permitted levels of production than they are at optimum production rates. As is the case with most mineral processing systems, maximum efficiency and lowest overall emission rates can only be established through operating experience.

d) the permitted N0x emission limit of 2.8 lbs/ton clinker was found to be achievable prior to the addition of the MSC system. Yet, the company proceeded with the installation of the MSC system at considerable capital cost and loss of production due to the required plant outage, to achieve further environmental benefits, including the ability to burn used vehicle tires.

e) prior to Florida Rock's installation of the MSC system, the Department became aware of the potential benefits of an MSC system and issued a construction permit to Suwannee American for a plant substantially identical to the modified TSB plant, giving it significantly higher production limits with similar emission values compared to the TSB plant. The Department was confident, that the MSC system could achieve N0x reductions while increasing production rates.

f) the investment made by the applicant has also substantially reduced CO emissions. This reduction was not required as part of the permit conditions.

Consequently, Florida Rock requests that the Department recognize the experiences gained in the operation of the TSB plant and update its Title V permit to reflect the practical production parameters.

A. Proposed Amended Production Rates

1. The permit allows for 8,760 hours of plant operation, which computes to 839,208 tons clinker production per year at the permitted hourly rate of 95.8 tons, as opposed to the 712,500 tons clinker production limit contained in the permit. The revised annual production figure will be identical to the limit contained in the Suwannee American permit.

2. Limit the daily production rate to 2,705 tons clinker, which must be produced to allow for 15% maintenance shutdown time.

3. Limit the hourly production rate to 112.6 tons, which is derived by producing at the daily limit during a 24 hr period.

4. Compute the kiln feed rate limit, by adding the loss of ignition, the coal ash and the circulating dust load to the hourly permitted clinker production. The hourly ratio of feed to clinker is not constant and is a function of the circulating dust load, which is metered as part of the kiln feed.

5. The permit contains sufficiently high production limits for all other regulated main manufacturing units (i.e. the raw mill and the cement mill) to fully take advantage of the proposed amendments to the kiln production limits.

B. Proposed Amendments to the Air Emission Rates

In accordance with the proposed amended production rates, the significant pollutant limits will be adjusted with respect to hourly, daily and per unit values. The adjusted limits will not exceed the permitted values contained in the Title V permit on an annual basis and will further recognize the plant's ability to accept a meaningful reduction of other permitted emission limits.

1. N0x - at the restated clinker production rate of 839,208 tons per year, the hourly maximum emission will be 292.8 lbs. The N0x emission on a per ton basis will not exceed 2.8 lbs but may go as low as 2.6 lbs at the optimum production rate of 112.6 tons per hour, assuming the linearity of the curve established within the existing permit limits.

2. CO - for the emission of CO, the applicant will recognize a significant reduction, owing to its installation of the MSC system and will cut the permitted limit by 15% to 1,042.6 tons per year and 238 lbs per hour, compared with the existing limits of 1,228.6 tons per year and 346.8 lbs per hour respectively.

3. SO2 - the sulfur dioxide limit is presently 108.55 tons per year. The applicant proposes to reduce this limit by 50%, resulting in the following adjusted limits:

Unit	Old limit	New limit
tons/year	108.55	54.28
lbs/hr	28.82	12.4

4. Particulate Matter - we are proposing to reduce the present limit of 110.5 ton/year by 10% to 99.45 tons.

5. Beryllium - the Department intends to delete this compound from its list of regulated pollutants

6. Sulfuric acid mist - the present limit of one (1) ton per year should be maintained to allow for changes in the fuel source.

C. Fuel Consumption

The permitted fuel consumption is based on operating the kiln 100% of the available hours in any one year and demonstrates the inconsistencies in the permit. The presently permitted coal consumption could produce nearly one (1) million tons clinker per year.

Fuel Type	Old limit	New limit	% Reduction
Coal, tons/year	122,640	110,000	18.5
tons/day	336	274	
tons/hour	14	11.4	
MMBtu/hour	364	296.4	
Fuel Oil (Raw Mill Heater)			
Gals/yr	2,486,000	1,000,000	59.8
Gals/hr	283.8	283.8	0.0 (1)
Gals/day	6,811	6811	

(1) The reduction is due to the frequency of usage and the lesser usage as drying fuel than was anticipated. The operation of the raw mill without the availability of exit kiln gas still requires the full amount of oil when the raw mill is operating during kiln shutdowns.

D. Rationale for Approval of the amended Production Limits

The requested changes are consistent with a number of Florida and federal economic and environmental policies and goals, in that they

a) improve productivity (more output per man-hr worked)
b) increase fuel efficiency. With increased production, the fixed energy losses are spread over a larger amount of production, thus reducing fuel consumption per unit produced.
c) reduction in total permitted gaseous pollutants.
d) make the individual emission limits consistent with the intent of the permit and consider necessary maintenance of production and emission control systems as an integral part of the permitted plant capacity
e) the restated production limits will allow the applicant to realize the economic benefits expected when it embarked on the permitting process
f) the proposed amendments have no negative impact on the total emissions provided by the Title V permit as issued. In fact, the applicant proposes several meaningful reductions in the permitted limits.

We would very much appreciate an opportunity to discuss these issues with you at your earliest convenience, to seek guidance for the preparation of a formal application to amend the permit.

With best regards

Fred

Fred W. Cohrs

Cc: Cary Cohrs
George Townsend

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

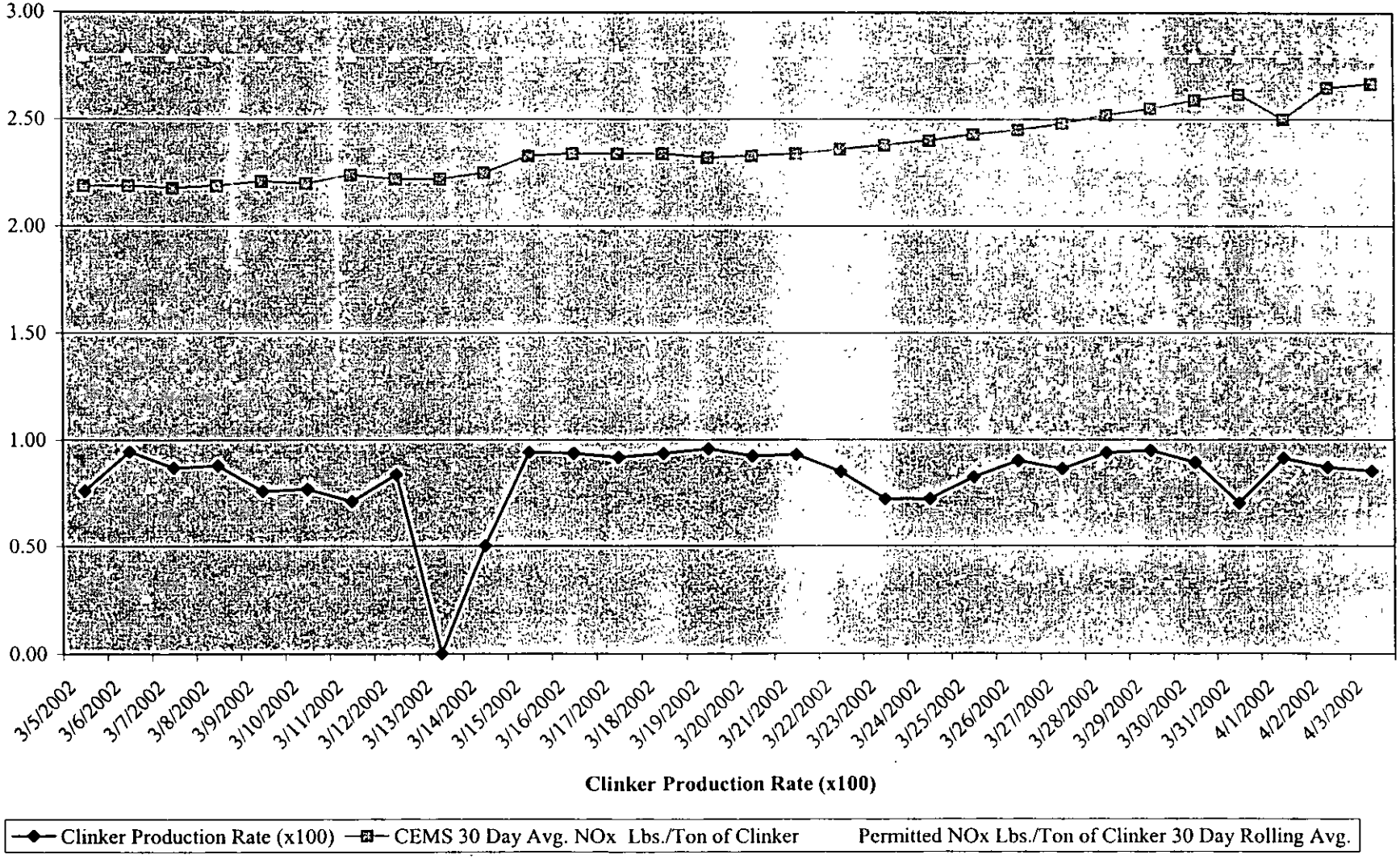
Kiln Stack NOx Emissions - Rolling Average Lb./Ton of Clinker Produced

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



Department of Environmental Protection

Jeb Bush
Governor

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

March 22, 2002

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. George Townsend
Environmental & Safety Manager
Florida Rock Industries
Post Office Box 459
Newberry Florida 32669

Re: CEMS Data – NO_x Emissions

Dear Mr. Townsend:

Thank you very much for setting up the plant tour on March 7 and the opportunity to discuss with Division staff the performance of the kiln since the installation of the new multi-stage calciner on the kiln. We received your March 11 letter that included revised graphs of nitrogen oxides (NO_x) emissions over the past year.

The graphs appear to reflect the 30-day averages for only a single day of each month. We had expected to receive instead the 30-day averages for each day of each month. The graphs we received with your March 11 letter were apparently developed excluding the data for days during which the kiln made no clinker. Please confirm that they also exclude the hours during which no clinker was made on days during which clinker was made. In the short term, we request resubmission of the graphs showing the day-by-day 30-day rolling averages.

Per Table II of the permit, "the Department may revise the limit to less than 2.8 lb/ton clinker (30-day rolling average) based on continuous emissions monitoring data covering the period January 1-March 31, 2002 to be submitted by Florida Rock to the Department's Northeast District by April 15, 2002." Although the graphs provided show the general trend in emission rates over about a year's time, we will need the detailed monitoring data to finalize the BACT limits as required by the construction permit.

In addition to the January 1 through March 31, 2002, data due on April 15, we request the data covering the period July 1 through December 31, 2001. These monitoring data should consist of each hourly average NO_x emission rate taken while fuel was fired in the kiln in units of lbs/hr and lbs/ton of clinker. This data set should also include the hourly clinker production rates (tons) and exhaust flow rates (actual cubic feet per hour). The calculated daily average emission rates of NO_x in lbs/ton of clinker for each day and the calculated 30-day rolling averages should also be included. Include example calculations showing how these averages are calculated.

Also include a discussion of the criteria used to exclude any emissions data due to startup, shut down, malfunction or no clinker production. We expect inclusion of emissions data in terms of lbs/hr of NO_x (but not lbs/ton clinker) during periods when fuel is fired in the kiln but there is no clinker production. Please submit these monitoring data in spreadsheet format if possible.

We recommend discussing the data requirements directly with our staff. If you have questions on this matter, please contact Greg DeAngelo at (850)921-9506 or Martin Costello at (850)921-9511.

Sincerely,

C.H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/mc

Cc: Cary Cohrs, FRI
Chris Kirts, DEP NED
Al Linero, DEP BAR

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. George Townsend
Environmental & Safety Manager
Florida Rock Industries
Post Office Box 459
Newberry, FL 32669

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Becky Hurley
B. Date of Delivery:
C. Signature: X Becky Hurley ☐ Agent ☐ Addressee
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

NEWBERRY FL 32669
MAR 25 2002
USPS

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

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

7001 0320 0001 3692 9120

PS Form 3811, July 1999 Domestic Return Receipt 102595-00-M-0952

U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail Only; No Insurance Coverage Provided)

7001 0320 0001 3692 9120

Postage	$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: George Townsend
Street, Apt. No.; or PO Box No.: PO Box 459
City, State, ZIP+4: Newberry, FL 32669

PS Form 3800, January 2001 See Reverse for Instructions

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

March 11, 2002

Mr. Al Linero, P.E.
Administrator
Bureau of Air Regulations
New Source Review Section
Division of Air resource Management
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road MS 5510
Tallahassee, Florida 32399-2400

Re: CEMS Data - NOx Emissions

Dear Mr. Linero:

As per the request of Mr. Howard Rhodes, I have revised the NOx emissions data and the NOx Lb./Ton of clinker data for the months of May 2001 through February 2002. I revised the CEMS data, for the months indicated, to remove the days for which there was no production form the daily averages and resulting monthly averages. This data reflects a more accurate indication of the process NOx emissions. The production/down days were set to "monitoring not required" MNR in the CEMS data files; no data was removed or deleted, which precludes this data from inclusion in summary averages. After all corrections were made for the months indicated the NOx data summary, for each day containing periods of no production, was set for manual recalculation by the CEMS data handling system. Therefore, these corrections have been brought forward in the data handling system to reflect a current and corrected NOx emissions both Lbs./Ton and Lbs./Ton of Clinker. I have also contacted the CEMS software supplier and inquired about reconfiguring the CEMS software to automatically set the pollutant Lb./Ton of clinker to MNR when there is no production and this can and will be done, once a triggering input is decided upon. In the interim all emissions Lbs./Hr. and Lbs./Ton of clinker for periods of no production will be manually set to MNR and not included in the averaging period.

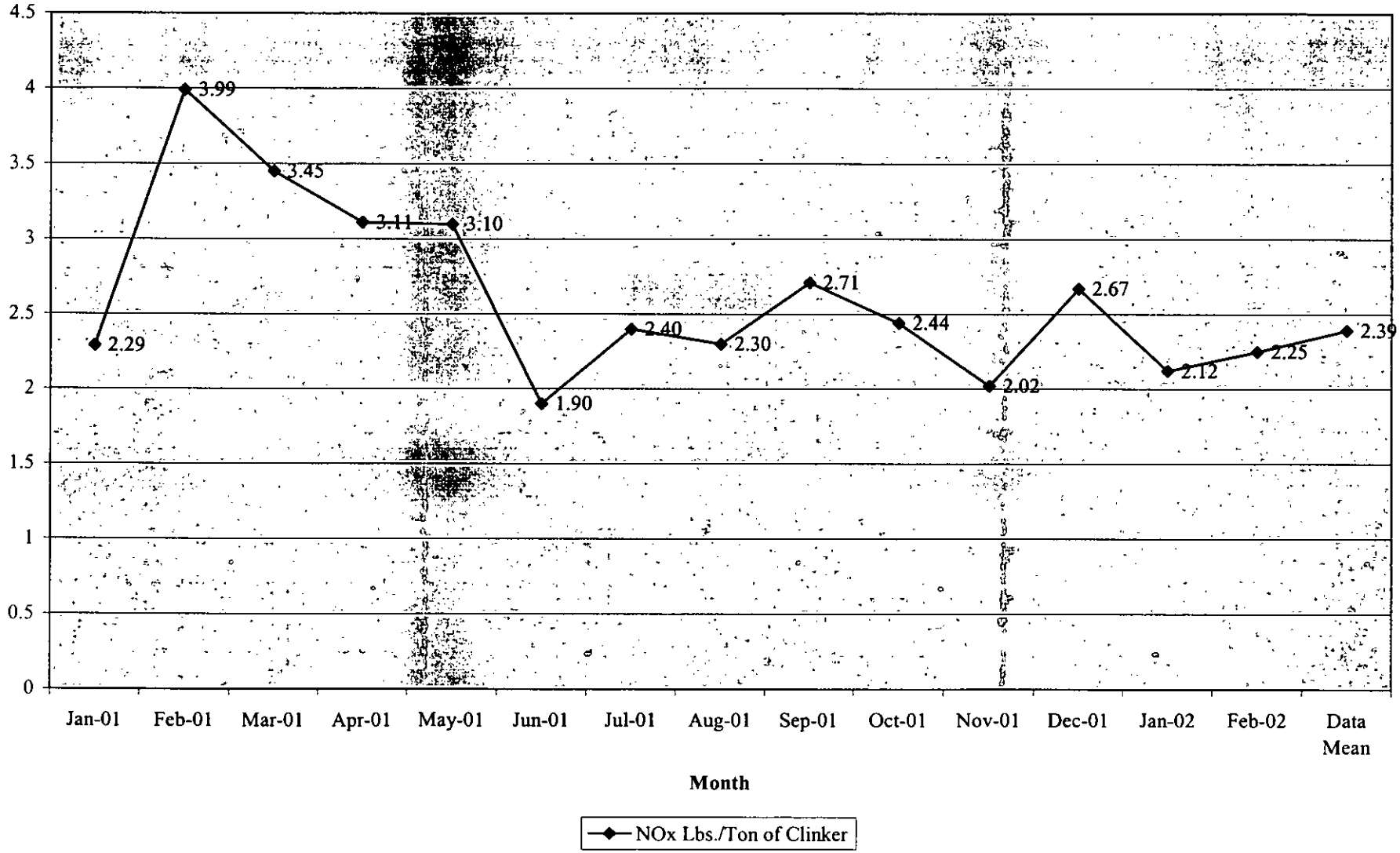
Should you have any question and/or comments concerning the above or require additional information, please contact me at (352) 472-4722.

Respectfully,

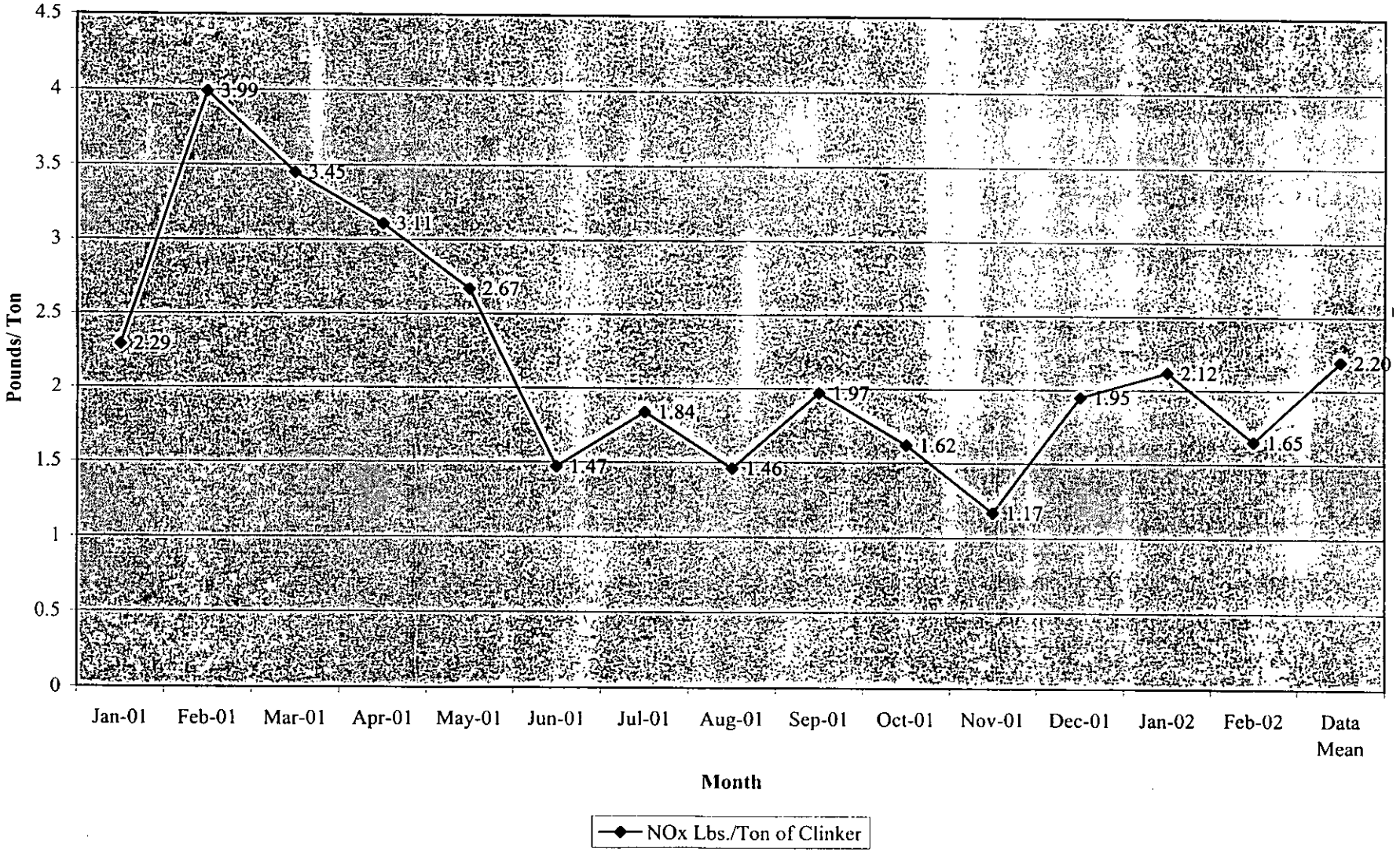
George Townsend
Environmental & Safety Manager

pc: Cary O. Cohrs, Vice President, Operations
Howard Rhodes, Director, FDEP DARM
File: Al. Linero-DEP.doc

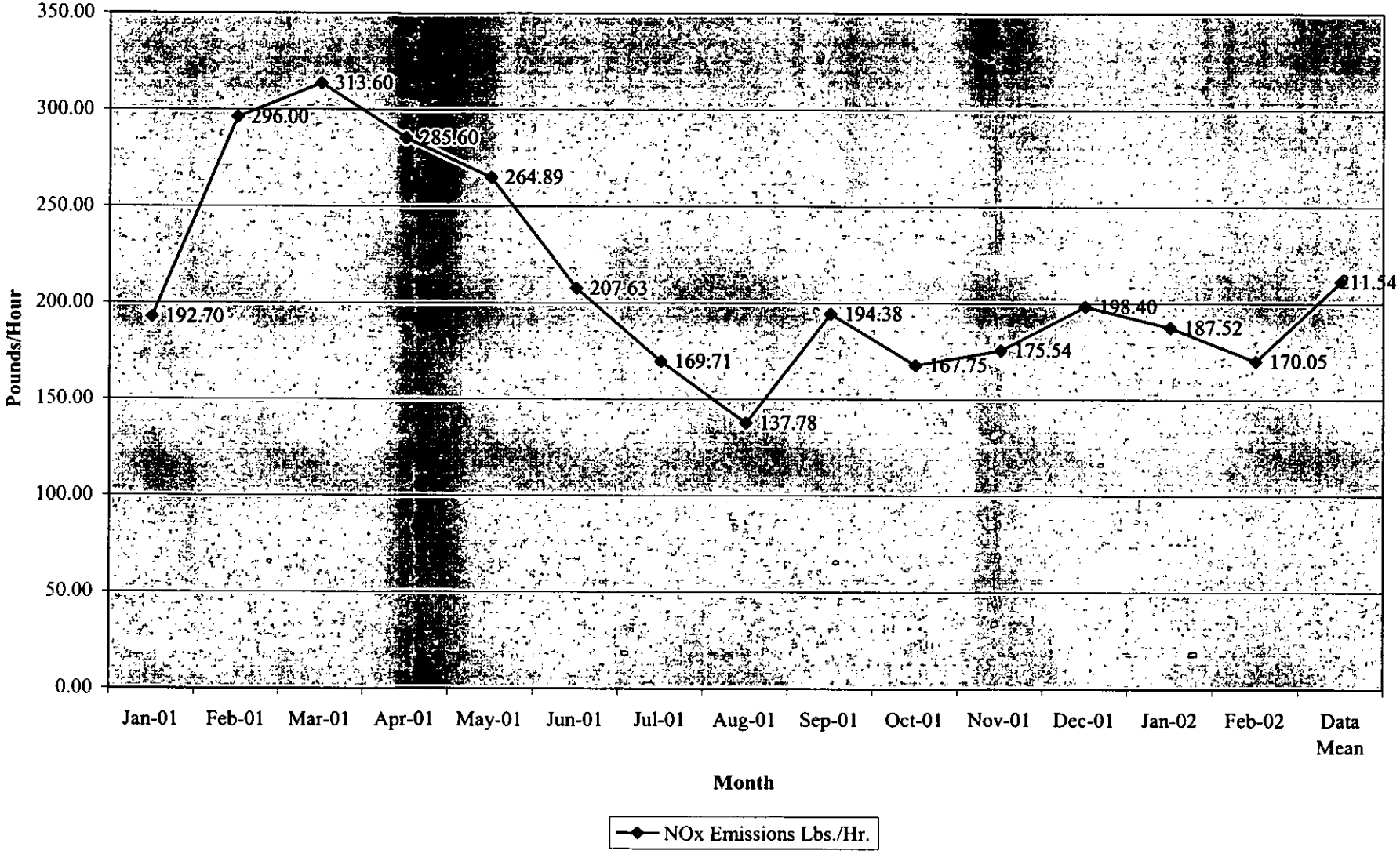
Revised Average Monthly NOx Emission Lbs./Ton of Clinker



Average Monthly NOx Lbs./Ton of Clinker



Revised NOx Emissions Lbs./Hr.



Average Monthly NOx Emissions