



Department of Environmental Protection

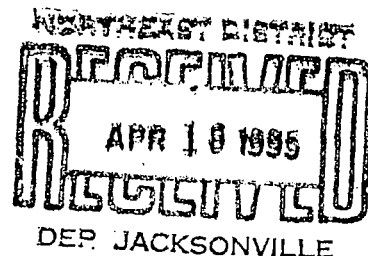
Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

April 14, 1995

CERTIFIED MAIL- RETURN RECEIPT REQUESTED



Mr. John D. Baker, President
Florida Rock Industries, Inc.
155 East 21st Street
Jacksonville, Florida 34601

Dear Mr. Baker:

Re: Newberry Cement Plant
Permits Nos. AC01-267311 and PSD-FL-228

The Department has reviewed the above referenced application package. Based on a technical review, the application is deemed incomplete. Please submit to the Department's Bureau of Air Regulation the following information, including all assumptions, reference material, and calculations.

EMISSION DATA

1. Supply detailed calculations of emissions of criteria and non criteria pollutants from the burning of the different proposed fuels at this facility. These should be in the same detail as already provided for particulate emissions. Include calculations for each combustion emission unit.
2. Per the 1990 Clean Air Act Amendment (CAAA), EPA is to issue a Maximum Achievable Control Technology (MACT) standard by November 15, 1997, applicable to cement plants. Per Title III (Air Toxics) of the CAAA's 189 Hazardous Air Pollutants (HAPs) are now regulated air pollutants. Please provide the emission rates and ambient maximum 8 hour, 24 hour and average annual concentrations for HAPs emitted from cement manufacturing.
3. On February 7, 1995, EPA issued a regulatory determination on Cement Kiln Dust (CKD) which was required by RCRA Subtitle C. Accordingly, EPA will develop CKD regulations. Although the

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the present status of CKD will be maintained until such rules are written, we encourage the applicant to develop a multipathway health risk assessment to address the potential for indirect health and environmental effects from the kiln's emissions. EPA's Region VII Office (Kansas City, KA) is developing a generic workplan for cement kilns burning hazardous waste in their region. The workplan uses a tiering approach to expedite the process. It is suggested that the applicant review the draft document (a copy is available from this office, if requested) developed by the EPA Region VII Office as a possible mechanism for developing a less time and resource intensive protocol for completing a risk assessment.

4. What additional assurance can you provide the Department that the emissions of the various pollutants emitted at this facility are not a threat to human health and welfare (such as by the fuels burned, etc.).

PROCESS EVALUATION

5. Emission Unit 1 (Raw Materials Handling and storage). Is a baghouse or other air pollution control device used to control PM emissions from any storage building or process equipment?

6. Submit design specifications of each baghouse that will be used. How was the flow (dscfm) calculated for each baghouse. Show any estimates used in these calculations.

7. Describe procedures for startup and shutdown of the process equipment to insure minimization of excess emissions.

8. Provide a plan to establish good combustion practice to minimize NO_x, CO, and VOC emissions from the kiln. Ultimately, such a plan should be reflected in the plant operating procedures.

9. Submit an analysis of specifications and quantities of the different fuel combinations to be burned at each combustion source at this facility. Discuss any blending of fuel types.

10. Describe how captured dust from the ESP will be removed from the system and disposed. What precautions will be used to minimize unconfined emissions while handling the dust?

11. What reasonable precautions will be used to minimize unconfined particulate matter emissions from the plant (quarries, haul roads, CKD handling equipment, dust disposal piles manufacturing area, etc).

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BACT EVALUATION

12. Explain the NOx controls proposed for each combustion source. Provide drawings and design details (text) for any low NOx burners, staged combustion or other methods used to lower free O₂ available for NOx formation.

13. Explore the option of utilizing a baghouse and discuss the benefits/problems of this approach compared to the ESP. Include a discussion of SO₂ control and HAPs and any effects on start-up emissions of particulate matter and visible emissions. What is the actual SO₂ removal of the system?

14. Discuss feasibility of using cleaner fuels, such as natural gas or No. 2 fuel oil at 0.05% sulfur, to minimize SO₂ and NOx emissions. For reference permitted NOx emissions are 3.14 lbs/ton of clinker at Florida Mining and Materials (2/93) and permitted SO₂ emissions are 0.31 lb/ton of clinker at Ash Grove Cement (6/90). Investigate any emerging technology for the control of NOx.

15. The BACT analysis must be expanded. BACT is done on a case-by-case basis and, at a minimum should include a technical, economic, and environmental analysis of any applicable control technology. Please refer to EPA's New Source Review Workshop Manual.

AIR QUALITY ANALYSIS

16. Although some preliminary air quality modeling results have been provided to the Department within the period of review of this letter, these results have shown that more extensive modeling is necessary to complete the required PSD air quality analysis. Therefore, further air quality analysis review can not be performed without the submittal of this more extensive modeling. Please provide a copy of all modeling input and output in both diskette and paper formats.

APPLICATION FORM

17. Complete applicable questions on pages 104-106-108-112-113-115 of application form DER Form No. 62-210.900(1). There are also a few other blank fields throughout the application that need to be completed.

GENERAL

18. Will the proposed project comply with all of the Alachua County air pollution control regulations?

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19. Please be advised that we are still awaiting comments from EPA and the National Park Service. As soon as we have received these comments, we will forward them to you.

SOLID WASTE REVIEW

20. Please locate and label on the drawings the areas to be used for storage of solid waste. These areas include, but are not necessarily limited to, the used tire, fly ash, sandblast grit, gypsum and coal ash storage areas. Please provide information to ensure that the storage areas are not in violation of the prohibitions given in Florida Administrative Code (F.A.C.) Rule 62-701.300.

21. Please provide additional information concerning the handling of waste tires at the site. According to page 3 of the report portion of the application, the tires will be whole tires stored for use in burning only.

22. Please provide a list of the sources of the materials to be used as additives, i.e. gypsum, coal ash, etc. In addition, please provide and/or propose a mix composition for the additives. This feed/product mix composition should also include that material generated on the site such as material from the baghouse. Please note that it is unclear exactly what the 1.7 feed to clinker ratio mentioned in the application represents; therefore, clarification of what constitutes the feed and the clinker is required. Figure 2-5 indicates that gypsum is added after the clinker storage area. Is this the proposed addition point for all proposed additives except the fly ash which is to be added at the crusher? If not, is the crusher the addition point for all additives except gypsum?

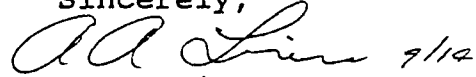
23. Please provide a description of the handling (and transporting) of the residual material, such as the baghouse material, to ensure that it remains in the closed loop of the process and does not make contact with the soil at the facility at any time.

24. Please provide a contingency plan addressing timeframes and activities relating to disposal of kiln dust, gypsum, fly ash, tires, coal ash and other solid waste materials should the facility cease operation or discontinue operation for some period of time that you propose. Please include a statement concerning how and where the solid waste items above will be disposed. Please note that the Department will make a determination concerning the proposed length of time requested prior to beginning disposal of stored solid waste at the facility.

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We will resume processing the application after the requested information is received. If you have any questions on this matter, please write to me or call Marty Costello, P.E. (BACT Engineer), Cleve Holladay (Meteorologist) or Teresa Heron (Review Engineer) at (904) 488-1344. From the Northeast District office you can call Mary Nogas (Solid Waste Review Engineer) at (904)448-4320.

Sincerely,



A. A. Linero, P.E.
Administrator
New Source Review Section

AL/th/t

cc: Robert Leetch, P.E., NED
John Koogler, P.E., K&A
Jewell Harper, EPA
John Bunyak, NPS
Pat Reynolds, DEP
Emerson Raulerson, NED
Mary Nogas, NED