



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.  
ATLANTA, GEORGIA 30365

JUN 15 1995

4APT-AEB

Mr. Clair H. Fancy, P.E.  
Chief  
Bureau of Air Regulation  
Florida Department of Environmental  
Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RECEIVED

JUN 21 1995

Bureau of  
Air Regulation

SUBJ: Florida Crushed Stone Company (FCSC), Brooksville,  
Hernando County, Florida (PSD-FL-227)

Dear Mr. Fancy:

This is to acknowledge receipt of an application for a Prevention of Significant Deterioration (PSD) permit for the proposed major modification to the above referenced Portland cement manufacturing facility by your letter dated March 14, 1995. The proposed major modification consists of the addition of a second dry process cement kiln. Capacities of both existing and proposed cement kilns will be identical, 600,000 tons per year (TPY) of cement each. The new kiln will be preheated with fuel oil, fired with coal as the primary fuel, and utilize tires as supplemental fuel. The kiln will utilize a direct-fired pulverized coal and oil burner designed specifically for cement kilns. The maximum utilization rate for tires as supplemental fuel will not exceed fifteen percent of the total heat input to the cement kiln. Both kilns will use the same existing storage and material handling equipment.

As discussed between Ms. Teresa Heron of your staff and Mr. Stan Kukier of my staff on June 7, 1995, we have the following comment.

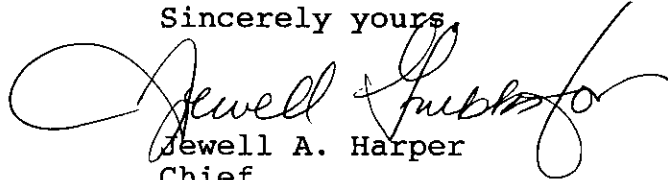
Emissions calculations for cement kiln sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM), and inhalable particulate matter (PM<sub>10</sub>) emissions should be provided by the applicant. The basis of the calculations, including all references and assumptions, should also be provided by the applicant. The applicant should clarify which criteria pollutant emissions estimates are based on recent stack test results. The stack test results, including detailed background information regarding test methods and when the stack testing was performed, should also be provided. Stack tests are mentioned in Sections 3.3.1, 3.3.4, 3.3.5, and 3.3.6 of the PSD permit application. The applicant should also provide specific

cost effectiveness values for the application of SO<sub>2</sub> and acid gas scrubber technologies mentioned on page 4-13 to Portland cement facilities. Information on page 4-13 of the PSD permit application mentions that scrubber technologies have been shown to be cost prohibitive for Portland cement facilities.

The new FCSC cement kiln will be subject to the requirements of 40 CFR Part 60, Subpart F - Standards of Performance for Portland Cement Plants.

Thank you for the opportunity to review and comment on this application. If you have any questions, please contact Mr. Stan Kukier of my staff at (404) 347-3555, voice mail box extension 4143.

Sincerely yours,



Jewell A. Harper  
Chief

Air Enforcement Branch  
Air, Pesticides, and Toxics  
Management Division

cc: Teresa  
Cleve  
J. Kussel  
C. Hetrick  
NPS  
BUCK  
Tom Mountain



# RTP ENVIRONMENTAL ASSOCIATES INC.®

AIR • WATER • SOLID WASTE CONSULTANTS

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Green Brook, New Jersey 08812-1909

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*al*  
*For Permit*  
*File*

May 19, 1995

Mr. Clair Fancy  
Florida Department of Environmental Protection  
111 S. Magnolia, Suite 4  
Tallahassee, Florida 32301

RECEIVED

MAY 22 1995

Bureau of  
Air Regulation

Re: Hernando County Planning Department Comments  
on Florida Crushed Stone Company PSD Permit Application PSD-FL-227

Dear Mr. Fancy:

RTP Environmental Associates, Inc. (RTP) and the applicant have prepared the following responses to the comments in the April 28, 1995 letter from Lawrence Jennings of the Hernando County Planning Department to Patricia Adams of FDEP. These responses are given below in the numbered order in the Hernando County letter.

- (1) PSD review is triggered for a major source if any one pollutant is emitted in quantities above the significant emission rate for that pollutant. PSD reviews were performed previously for both the power plant and the existing cement kiln. The current permit application is also undergoing a PSD review.
- (2) The current review of the permit application will consider the use of natural gas. Therefore, no additional permitting will be required beyond the current review. Emissions during use of natural gas, generally a cleaner fuel resulting in lower sulfur and particulate emissions, are expected to easily meet the permit limitations developed for other fuels for all pollutants.
- (3) Chemical equation (1) on page 4-17 should read:  
$$(1) \quad 4\text{NO} + 4\text{NH}_3 + \text{O}_2 \rightarrow 4\text{N}_2 + 6\text{H}_2\text{O}$$
- (4) Tampa International Airport is the closest National Weather Service (NWS) office which measures and records meteorological data continuously on a 24 hour per day, 365 day per year basis. Continuous meteorological data (i.e., 8760 hours per year) are required by the air quality models used in the air permit application to estimate air quality impacts. Meteorological data measured at Tampa Airport are expected to be representative of meteorological conditions which occur at the Florida Crushed Stone facility given the similar locations of the Tampa airport and Hernando County on the central Gulf of Mexico coast of Florida.

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The USEPA Guideline on Air Quality Models (Revised) indicates that variability of model estimates (due to different periods of meteorological data) are adequately reduced if a 5-year period of meteorological data are used (p. 9-11). Therefore, five full years of meteorological data are generally required to conduct an air quality impact analysis and no specific 5-year period of meteorological data would be expected to be more representative of worst-case impacts than any other 5-year period. For the subject application, the 1982 through 1986 period was selected for consistency with modeling analyses submitted by other applicants, particularly those which addressed Class I impacts in the nearby Chassahowitzka National Wildlife Refuge.

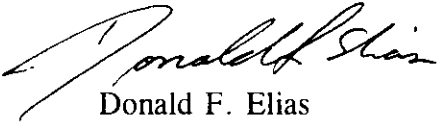
- (5) Ambient air quality for PM<sub>10</sub>, NO<sub>2</sub>, CO, O<sub>3</sub>, and lead would likely be better in Hernando County than the values used in the permit application from northern-Pinellas, southern-Pasco county area because of the more rural setting of Hernando County. Air quality impacts for the proposed cement kiln presented in the air permit application are very small, generally below the levels considered by USEPA to be insignificant. Therefore, the ambient air quality standards would still be maintained by a wide margin regardless of the background ambient air quality values selected by the applicant for use in the air permit application.
- (6) Under current schedules, the USEPA is expected in June to publish in the Federal Register proposed revisions to the New Source Review regulations which would include significant impact levels (SILs) for Class I areas. FDEP will review the Class I impacts presented in the air permit application for the proposed cement kiln at that time for consistency with the proposed SILs to determine if additional analyses are required. This will not affect the currently expected permitting schedule since FDEP does not expect to make a final determination on the air permit application until late summer. Finally, FDEP has notified the National Park Service (NPS) about this application and has been coordinating the state permit review with the NPS in accordance with PSD requirements.
- (7) The applicant proposes using the same blend of 15% on-specification used oil with 85% new fuel oil as currently permitted for the existing cement kiln and has requested similar permit conditions for the proposed kiln. These permit conditions will limit the concentrations of numerous constituents in the used oil, including total halogens, and specify a minimum 140°F flash point to ensure that the used oil is not hazardous waste in accordance with Hernando County Ordinance 90-8.
- (8) As noted in the previous response, the applicant has requested permit conditions similar to the existing cement kiln permit which will ensure that the on-specification used oil is not hazardous waste, which includes a PCB limit of 50 ppm. The <2 ppm limit surmised from 40 CFR 761.20(e)(3) restricts the marketing of used oil containing greater than 2 ppm and applies only to hazardous waste facilities. Since the facility is not a hazardous waste facility and only burns used oil from the FCSC Greg Mine and CPL plant, this restriction does not apply to the proposed cement kiln.

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If you have any questions or need any additional information, please feel free to contact me at 908-968-9600.

Sincerely,

RTP ENVIRONMENTAL ASSOCIATES, INC.®



Donald F. Elias  
Principal

DFE/WEC/wec

cc: T. Mountain; Florida Crushed Stone  
L. Curtin, Esq.; Holland & Knight  
H. Oven, T. Heron, C. Holladay; FDEP  
L. Jennings, Lizanne Garcia; Hernando County Planning Dept.  
M. Hober, W. Corbin; RTP  
FCS Project File

J. Kussel, SWD  
EPA  
NPS