

Department of Environmental Protection

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

Colleen M. Castille Secretary

August 25, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Herschel E. Morris, Vice President Phosphate Operations/General Manager CF Industries, Inc. Post Office Drawer L Plant City, Florida 33564

Re: DEP File No. 0570005-021-AC; PSD-FL-355

'A' Sulfuric Acid Plant (SAP) & 'A' and 'B' Phosphoric Acid Plants (PAPs) Production Increase

Plant City Phosphate Complex

Dear Mr. Morris:

The Department received the amended PSD application on April 6, 2006 for the Plant City Complex in Hillsborough County. The Department requested additional information regarding the modeling analysis on May 5, 2006. A response to this request was received July 28, 2006 from Golder Associates on behalf of CF Industries.

The Department has determined that additional information is needed in order to continue processing this application package. Please submit the information requested below to the Department's Bureau of Air Regulation:

- 1. Additional information received by the Department, dated July 27, 2006, comment C-2 on page 7, states that the Annual Fertilizer Production of 2,735,528 TPY is calculated from the permitted production capacity of "X," "Y" and "Z" DAP/MAP plants. Please show this calculation. Will this production capacity increase with the proposed modification? Comment C-2 also states that "production of 'A' DAP/MAP is not included as it is not operational." Will plant "A" become operational? Is it permitted to operate?
- 2. Additional information received by the Department, dated July 27, 2006, comment C-3 on page 8, does not include specific information regarding land use as requested. Please provide specific information concluding that the land use at the meteorological site is representative of the land use at the facility.
- 3. The same comment, C-3 on page 8, states that 5-year AERMET data provided by the Department has "questionable surface characteristics" and that the "State is currently

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considering modifying the data set." The Department has provided a final Tampa dataset. While this dataset may be replaced in the future based on EPA guidance, the Department is currently requiring the use of this dataset and does not consider the data "questionable." Please use the Tampa dataset if deemed representative and provide those results to the Department.

- 4. Please explain how the Initial Vertical Dimension was determined for the volume sources, including trucks. In Comment C-8 of the additional information received by the Department, dated July 27, 2006, the release height was explained. The Department requests an explanation of how "Initial Vertical Dimension" was calculated. For example, the release height of a truck in the modeling analysis is 7.5 feet. If the source is not directly adjacent to a building, this height should be divided by 4.3 to obtain the Initial Vertical Dimension. For a 7.5 ft. release height, the Initial Vertical Dimension should equal 1.7 ft. The modeling shows 6.99 ft. While this may be correct, the Department requests an explanation of why 6.99 ft was used.
- 5. Additional information received by the Department, dated July 27, 2006, comment C-12, refers to the increment modeling receptor grid. The Department recognizes that AERMOD runs take a longer period of time than the previous ISC runs. However, the Department requires that the complete Significant Impact Area be modeled to ensure that no increment is exceeded. Please model the PM short term increment with a receptor grid to cover the entire Significant Impact Area for the one year of meteorological data that shows the greatest impact result from the initial receptor grid. The Department will run the other four years if deemed necessary.

The following comments from the EPC of Hillsborough County refer to additional information received August 1, 2006 from Golder Associates on behalf of CF Industries:

- 1. According to the Response to the RAI, Appendix A-1, CF Industries requested a maximum production rate of 1600 TPD, 3.5 lb-SO₂ per ton-H₂SO₄ (equivalent to 233.3 lb/hr) on a 3-hour and 24-hour average and annual SO₂ emissions of 1022 TPY for the A-SAP. However, the Appendix B-3, PSD Report, referred by the Response to Comment B-3 has not been revised. It still refers to a 3.85 lb-SO₂ per ton-H₂SO₄ on a 3-hour average. Also, the permit application page, Subsection III, Page 20, has not been corrected and resubmitted.
- 2. CF Industries requested a new SAM emissions limit on the A-SAP, an hourly 0.75 lb-SAM per ton-H₂SO₄ (equivalent to 5 lb/hr) and annual SAM emissions of 21.91 TPY. However, the change has not been reflected on the resubmitted PSD Report, Page 2-3. Also, the permit application page, Subsection III, Page 20, needs to be corrected and resubmitted.
- 3. A review of the application and past inspection reports indicate that sulfuric acid from the storage tanks is recirculated throughout all four acid plants. Please explain how the production increase at A-SAP will affect production and emissions from the other three SAP plants (debottlenecking). In addition, please explain why the Department should not consider all four SAPs as a single emissions unit for PSD purposes.

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Any additional comments from EPA, Hillsborough County Environmental Protection Commission and the U.S. Fish and Wildlife Service will be forwarded to you after we receive them.

The Department will resume processing this application after receipt of 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. A new certification statement by the authorized representative or responsible official must accompany any material changes to the application. Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

Please note that in accordance with Rule 62-4.055(1), "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."

We will be happy to meet and discuss the details with you and your staff. Mr. Syed Arif, P.E. is responsible for the technical review of the application. He may be contacted at 850/921-9528. You may discuss the modeling requirements with Ms. Debbie Nelson at 850/921-9537.

Sincerely,

Debbie Nelson

Debbie Nelson, Meteorologist Bureau of Air Regulation

/sa

cc: G. Worley, EPA

J. Bunyak, NPS

T. Edwards, CF Industries

M. Nasca, DEP-SWD

J. Campbell, EPCHC

D. Buff, P.E., Golder Associates

COMPLETE THIS SECTION ON DELIVERY SENDER: COMPLETE THIS SECTION A. Signature ■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ☐ Agent Print your name and address on the reverse Addressee 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. D. Is delivery address different from item 1. Article Addressed to: If YES, enter delivery address below: Mr. Herschell E. Morris, Vice President Phosphate Operations/General Manager CF Industries, Inc. Post Office Drawer L Plant City, Florida 33564 Service Type Certified Mail
Registered Express Mail ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D. 4. Restricted Delivery? (Extra Fee) ☐ Yes 2. Article Number (Transfer from service label) Domestic Return Receipt PS Form 3811, February 2004 102595-02-M-1540

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