

Department of Environmental Protection

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

David B. Struhs Secretary

February 20, 2004

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. 0570005-019-AC; PSD-FL-339 Sulfuric Acid Production Increase Plant City Phosphate Complex

Dear Mr. Morris:

The Department has received the above referenced application on January 22, 2004, for the Plant City Complex in Hillsborough County. Based on our initial review of the proposed project, we have 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. The Department recently issued a PSD permit (PSD-FL-325) to IMC for increase in sulfuric acid production at the New Wales facility. The plants were required to show compliance with the 3-hour and 24-hour SO₂ limit using continuous emissions monitoring system (CEMS). Please provide reasonable assurance to the Department that CF will be able to comply with the proposed BACT limits for SO₂ using CEMS. Additionally, the BACT NOx limits were established as 0.12 lb/ton 100% H₂SO₄. Please provide reasonable assurance to the Department that CF will be able to comply with this limit of NOx.
- 2. Please provide the Department with reasonable assurance that the efficiency of the absorbers and the mist eliminators will not be degraded while operating at the higher process rates.
- 3. Please provide emissions data for SO₂ in lb/ton of 100% H₂SO₄ for the last two years (monthly CEM averages) of operation for the 'C' and 'D' Sulfuric Acid Plants (SAP's). In providing this data, please present it in a graphical representation against time. On the same graph, indicate the production rate for the plant (monthly averages) and indicate the turn-around date, if any, for the two SAP's on the time axis.
- 4. Indicate what modifications were done to each plant during the turn-around. If catalysts were screened or replaced, indicate which conversion passes were selected for catalyst screening and/or replacement. Indicate the amount of catalyst replaced, if any.

"More Protection, Less Process"

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- 5. The application states that an economic analysis of meeting lower SO₂ emissions limit using cesium catalyst will be submitted in the near future. Please provide that information.
- 6. Please provide cost analyses in \$/ton of SO₂ and acid mist removed by using ammonia scrubbing with double absorption plants.
- 7. Hillsborough County Environmental Protection Commission (HCEPC) expressed their concerns regarding the replacement of 'C' SAP final and drying absorption towers packing. The replacement packing being considered is either "in kind" replacement or lower pressure drop packing such as Koch structured packing, Monsanto wave style packing or Cecebe HP perforated Intalox saddles. HCEPC would like CF to specify which packing they intend to use as the replacement packing or determine potential emissions with all the different packing options. Are the emissions going to vary from the final tower depending on what replacement packing is selected? Does CF plan to use two different sizes of packing as it exists now in the final and drying towers? If so, what will be the locations and respective depths of each packing material?
- 8. The modeling files submitted include ISC modeling files and BPIP files. However, building downwash is not included in the ISC input. Please include building downwash effects in the modeling and re-submit the results or please clarify where the downwash was included in the modeling already submitted to the Department. Please verify that building downwash was included in the Calpuff modeling input for the Class I analysis as well?
- 9. According to the application, the Sulfur Deposition Rate is predicted to be slightly above the DAT for the Class I area. Are there any control technologies or methods that can reduce impacts in the Class I area?
- 10. Rule 62-4.070(5), F.A.C., requires the applicant to provide reasonable assurances that Department standards will be met at the installation. Please provide necessary information to show how CF will be able to comply with the requirements of 40 CFR Part 63 Subpart AA and Subpart BB relating to Phosphoric Acid and Phosphate Fertilizers Production Plants, respectively.

Any additional comments from EPA, Southwest District Office 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."

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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,

A.A. Linero, P.E.

Administrator

Permitting South Section

AAL/sa

cc: G. Worley, EPA

- J. Bunyak, NPS
- T. Edwards, CF Industries (Certified Mail)
- J. Kissel, DEP-SWD
- J. Campbell, EPCHC
- D. Buff, P.E., Golder Associates

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY			
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: EDWARDS CF INDUSTRIES, INC. POST CFFICE DRAWER L PLANT CITY, FLORIDA 33564	A. Received by (Please Print Clearly) B. Rate of Delivery C. Signature Agent Addressee D. Is delivery address different from item 1? If YES, enter delivery address below:			
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