



# Department of Environmental Protection

Jeb Bush  
Governor

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

Colleen M. Castille  
Secretary

May 1, 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 & 'A' and 'B' Phosphoric Acid Plants Production Increase  
Plant City Phosphate Complex

Dear Mr. Morris:

Enclosed are comments submitted by the Southwest District Office (SWD) in regards to the completeness issues for this project. Please submit the information as requested by SWD with a copy to the Department's Bureau of Air Regulation. We are still awaiting comments from Environmental Protection Agency and U.S. Fish and Wildlife Service, which 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.

If you have any questions regarding this matter, please call Mr. Syed Arif, P.E. at 850/921-9528 or Mr. Quaid Noor of SWD at 813/632-7600, Ext.112.

Sincerely,

Syed Arif, P.E.  
Bureau of Air Regulation

/sa

Enclosure

cc: G. Worley, EPA  
J. Bunyak, NPS  
T. Edwards, CF Industries  
M. Nasca, DEP-SWD  
J. Campbell, HCEPC  
D. Buff, P.E., Golder Associates, Inc.

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CF INDUSTRIES  
PLANT CITY PHOSPHATE COMPLEX  
0570005-021-AC (PSD-FL-355)

COMMENTS AND REQUESTS FOR ADDITIONAL INFORMATIONS (RAI) FOR THE  
ABOVE-MENTIONED PROJECT

1. Refer to attachment CF-EU1-I1, "A" Phosphoric Acid Plant Block flow diagram, please explain Steam Eductors in Flash Coolers, Forced Circulation Vacuum Evaporator 26% to 40% P<sub>2</sub>O<sub>5</sub>, and Forced Circulation Vacuum Evaporator 26% to 40% P<sub>2</sub>O<sub>5</sub>. Please submit the revised block flow diagram with correct items.
2. Refer to Subsection III, Page 14, Sulfuric Acid Plant A (SAP), Field No. 3, please correct the emission unit ID number from 003 to 002 and resubmit the corrected page.
3. Refer to Subsection III, Page 20, Sulfuric Acid Plant A (SAP) SO<sub>2</sub>, page No. 20, Field No. 8, Calculation of Emissions, and PSD Report page 2-3, 3<sup>rd</sup> paragraph, although lower SO<sub>2</sub> emission rates of 3.85 lb/ton (3-hr average), and 3.5 lb/ton (24-hour average) are proposed, 24-hour average and 12-consecutive month values increase significantly. Current TV permit (0570008-017-AV) allows: 5.6 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> (equivalent to 303.4 lb/hour for 1300 tpd of 100% H<sub>2</sub>SO<sub>4</sub> (3-hour rolling average), and 4.23 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> (equivalent to 229 lbs/hour, and 1,003 tpy for 1300 tpd of 100% H<sub>2</sub>SO<sub>4</sub> (consecutive 12-month rolling average). The proposed SO<sub>2</sub> 24-hour average is 233.3 lb/hour, and 1,022 tpy. Both these figures are significantly higher than current permit limit. Based on the information above, please explain the PSD Report page 2-3, 3<sup>rd</sup> paragraph sentence "*To achieve the proposed lower SO<sub>2</sub> emission limits...*". Please resubmit the corrected pages.
4. Refer to Subsection III, Page 20, Sulfuric Acid Plant A (SAP) SAM, page No. 20, Field No. 8, Calculation of Emissions, and PSD Report page 2-3, 4<sup>th</sup> paragraph, although lower SAM emission factor of 0.10 lb/ton of H<sub>2</sub>SO<sub>4</sub> is proposed, hourly and 12-consecutive month values increase significantly. Current TV permit (0570008-017-AV) allows: 0.3 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> (equivalent to 1.43 lb/hour (each hour), 0.83 lbs/hour (consecutive 12-month average), and 3.49 tons/year (consecutive 12-month period). The proposed SAM emission numbers are 6.67 lbs/hour (hourly), and 29.2 tons/year (annual). Both these figures are significantly higher than current permit limit. Based on the information above, please explain the PSD Report page 2-3, 4<sup>th</sup> paragraph sentence "*No new technology will be necessary to meet this limit...*". Please resubmit the corrected pages.
5. Refer to Subsection III, Sulfuric Acid Plant A (O<sub>2</sub>), page No. 24, Field No. 7, Continuous Monitor Comment: This emission unit No. 002 is not subject to NSPS Subpart H. Please correct and resubmit the page.
6. Refer to PSD Report, page 2-4, section 2.2.2, "A modification is proposed for the PAPs to increase the production rate by 20%, which will be facilitated by the installation of additional reactor flash cooling equipment, and/or increased evaporation capacity equipment, and double-gypsum filtration. Please show these modification items in the revised attachments CF-EU1-I1, and CF-EU2-I1 (revised block flow diagram for PAP A and PAP B) and resubmit the diagrams.

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul style="list-style-type: none"> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	<p>A. Signature  <input checked="" type="checkbox"/> Agent  <input type="checkbox"/> Addressee  <i>Sabrina R. Booker</i></p> <p>B. Received by (Printed Name) <i>Sabrina R. Booker</i> &amp; Date of Delivery <i>5-6-08</i></p>
<p>1. Article Addressed to:</p> <p>Mr. Herschel E. Morris, Vice President          Phosphate Operations/General Manager          CF Industries, Inc.          Post Office Drawer L          Plant City, Florida 33564</p>	<p>D. Is delivery address different from item 1? <input type="checkbox"/> Yes          If YES, enter delivery address below: <input type="checkbox"/> No</p> <p>3. Service Type  <input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail  <input type="checkbox"/> Registered <input type="checkbox"/> Return Receipt for Merchandise  <input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D.</p> <p>4. Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number (Transfer from service label) <i>7000 1670 0013 3110 0352</i></p>	

PS Form 3811, February 2004

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<p>1            Se Mr. Herschel E. Morris, Vice President            Phosphate Operations/General Manager            CF Industries, Inc.            St Post Office Drawer L            Ci Plant City, Florida 33564</p>									
<p>PS Form 3800, May 2000 <span style="float: right;">See Reverse for Instructions</span></p>									

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