

Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

April 26, 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 has received the amended PSD application on April 6, 2006, for the Plant City Complex in Hillsborough County. Based on our initial review of the amended 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 issued a PSD permit (PSD-FL-339) to CF Industries in 2005 for production increase in "C" and "D" Sulfuric Acid Plants at the Plant City facility. The plants which were double absorption units were required to show compliance with SO<sub>2</sub> limit of 3.5 lb/ton of 100% H<sub>2</sub>SO<sub>4</sub>; 3-hour rolling average using continuous emissions monitoring system. The proposed Best Available Control Technology (BACT) for SO<sub>2</sub> for the "A" SAP is the existing single absorption unit with the ammonia scrubber. The proposed 3-hour SO<sub>2</sub> limit is 3.85 lb/ton, 100% H<sub>2</sub>SO<sub>4</sub>. This BACT limit is not consistent with recent BACT determination for "C" and "D" plants. The cost effectiveness figure of \$4,469 per ton of SO<sub>2</sub> removed as given in the application for converting the existing single absorption plant to a double absorption plant does not include credit for the costs involved in utilizing the two-stage ammonia scrubber. Please recalculate the cost effectiveness figure by including the credit in shutting down the two-stage ammonia scrubber for SO<sub>2</sub> control.
2. Please provide the Department with reasonable assurance that the efficiency of the absorber and the acid mist eliminator will not be degraded while operating at the higher process rate.

*"More Protection, Less Process"*

*Printed on recycled paper.*

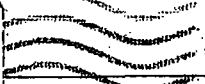
3. Please provide emissions data for SO<sub>2</sub> in lb/ton of 100% H<sub>2</sub>SO<sub>4</sub> for the last year (3-hour CEM averages) of operation for the "A" SAP. In providing this data, please present it in a graphical representation against time. On the same graph, indicate the production rate for the plant (3-hour averages) and indicate the turn-around date, if any, for the "A" SAP on the time axis.
4. Please elaborate on the necessary physical modifications for the "A" and "B" PAPs to achieve the increased production rates. The application in Section 2.2.2 is not clear on how this will be facilitated.
5. Please indicate the reasons for different gas flow rates through the "A" and "B" PAPs scrubbers. The application in Section 2.2.3 states that the typical gas flow rates through the "A" and "B" scrubbers are 49,900 acfm and 34,300 acfm respectively. Also, explain the reasons for the higher production "B" PAP to have lower gas flow rate than "A" PAP.
6. Please explain the reasons for the control equipments of the "B" PAP to be different than "A" PAP. The "B" PAP is lacking a cyclonic scrubber prior to the horizontal cross-flow packed-bed scrubber. What is the effect on fluoride (gaseous and particulate) emissions due to this set-up for "B" PAP?
7. Please provide the Department with reasonable assurance that the current control equipment(s) for the "A" and "B" PAPs are sufficient to meet the proposed fluoride BACT limits of 0.012 lb/ton of P<sub>2</sub>O<sub>5</sub> input while operating at the higher production rates. This can be done by submitting documentation on past test data and a PE sealed statement from the vendor authenticating that the existing control equipment(s) are sufficient to meet the established BACT limits for fluorides.
8. The application in Section 3.5.3.1 refers to the exemption from complying with the New Source Performance Standards (NSPS) for the existing "A" and "B" PAPs due to the National Emission Standards for Hazardous Air Pollutants (NESHAP). 40 CFR 63.610 Subpart AA provides those exemptions once the requirements of certain sections are met in the rule. Please provide documentation to the Department that the requirements of Sections 63.604, 63.605, 63.606 Subpart AA have been demonstrated.

The modeling analysis is being currently reviewed. Any request for additional information regarding ambient impact analysis will be submitted in a separate letter. 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."

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  X <i>Sabrina K. Baker</i> <input type="checkbox"/> Agent <input type="checkbox"/> Addressee</p> <p>B. Received by (Printed Name) <span style="float: right;">C. Date of Delivery</span>  <i>Sabrina K. Baker</i> <span style="float: right;"><i>5-2-06</i></span></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>Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes</p>
<p>2. Article Number  (Transfer from service label)</p> <p>7000 1670 0013 0697</p>	<p>PS Form 3811, February 2004 <span style="margin-left: 100px;">Domestic Return Receipt</span> <span style="float: right;">102595-02-M-1540</span></p>



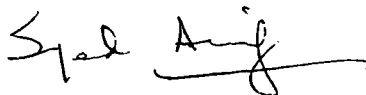
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<b>U.S. Postal Service</b> <b>CERTIFIED MAIL RECEIPT</b> <i>(Domestic Mail Only; No Insurance Coverage Provided)</i>											
<p>Mr. Herschel E. Morris, Vice President</p>											
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<b>Total Postage &amp; Fees</b>	<b>\$</b>										
<p>Sent To  <b>Mr. Herschel E. Morris, Vice President</b>  Street, Apt. No., or PO Box No.  Post Office Drawer L  City, State, ZIP+4  Plant City, Florida 33564</p> <p>PS Form 3800, May 2000 <span style="float: right;">See Reverse for Instructions</span></p>											

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 handwritten signature in black ink, appearing to read "Syed Arif". The signature is fluid and cursive, with a long horizontal stroke at the end.

Syed Arif, P.E.  
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