

Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

September 9, 2008

Electronic Mail – Received Receipt Requested

alan.luff@mosaicco.com

Mr. Alan Luff
Plant Manager
Riverview Facility
Mosaic Fertilizer, LLC
8813 U.S. Highway 41 South
Riverview, FL 33569

Re: Project Number 0570008-061-AC
Best Available Retrofit Technology (BART) Exemption Request
Riverview Facility

Dear Mr. Luff:

On August 11, 2007, the Department received a Best Available Retrofit Technology (BART) exemption request in the form of an air construction (AC) permit application for the Riverview Facility. This existing facility is located in Hillsborough County at 8813 U.S. Highway 41 South, Riverview.

In order to continue the processing of the permit application, the Department needs the following additional information. Should a response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

Additional Information Items on the Proposed BART Exemption

1. Please update the previously submitted graphical representations of the most recent 5 years of data from each SAP to cover calendar years 2003-2007 data (a copy of the previously submitted graphs is enclosed).
 - a. Include the prior data for each SAP, like:
 - i. the actual lb/ton 100% H₂SO₄ 3-hour & 24-hour averages versus the 4 lb/ton 100% H₂SO₄;
 - ii. the actual tons of 100% H₂SO₄ produced from each SAP; and,
 - iii. the dates of the turnarounds and the duration of the turnarounds for each SAP.

Request for Additional Information

Project Number 0570008-061-AC

Best Available Retrofit Technology Exemption Request

Riverview Facility

Page 2 of 4

- b. Based on the 2003-2007 data, has the level of actual emissions in units of lb/ton 100% H₂SO₄ compared to the permit allowable in terms of a percentage (%) from each SAP for each averaging period changed?
 - c. Using SO₂ continuous emissions monitoring system (CEMS) data, please provide the actual tons per year (TPY) of SO₂ for calendar years in the form of a chart for each SAP for calendar years 2003-2007.
 - d. Please provide the actual tons of 100% H₂SO₄ produced from each SAP for calendar years 2003-2007 in the form of a chart.
 2. As part of this application a Catalyst Supplier Study in Appendix C was provided.
 - a. In the provided study, a "larger cesium catalyst study" was referenced. Please provide a copy of this study. Was the use of the cesium promoted catalyst investigated? If so, what were the results and why was cesium promoted catalyst not proposed for use? (This application proposes to expand the volume of the beds and to use standard vanadium catalyst.)
 - b. Why is it not possible for the SAP No. 8 to achieve the desired conversion efficiency with the existing converter?
 - c. The total volume of the catalyst shown on page 2 for SAP No. 8 was "468320." This does not match the 575,000 liters cited in the text on page 5 of the BART Exemption analysis which prefaced the application. Please provide the support for the 575,000 liters mentioned?
 - d. Please provide the product literature from the catalyst supplier for the selected catalyst, Haldor Topsoe Inc.'s "VK, 12 mm Daisy."
 - e. Are the proposed new volumes in liters of each of the catalyst beds for each SAP Nos. 7, 8 & 9 shown as "passes"?
 - f. Is it possible to achieve the proposed SO₂ emission reductions without increasing the volumes of the catalyst?
 - g. Under the proposed changes to the SAPs is it anticipated that the SAPs will run longer? Will the time before a turnaround is necessary be extended?
3. According to Department records, the SWD Office is processing an air construction permit, project number 0570008-060-AC, for changes to equipment at SAP No. 8, specifically, for the replacement of the converter, super heater and cold heat exchanger.
 - a. What is the age of the current converter in SAP No. 8?
 - b. Are the proposed changes to the equipment at the SAP No. 8, replacement of the converter, super heater and cold heat exchanger, required to lower SO₂ emissions? Is it possible to achieve the proposed emission reductions without these physical changes?
 - c. Is the BART exemption project independent of this project?
4. Are the proposed physical changes to the SAP No. 7, i.e., replacement of the cold heat exchanger, necessary to lower SO₂ emissions? Are these requested physical changes solely in this permit application request?
5. Are the proposed physical changes to the SAP No. 9, i.e., replacement of the current interpass adsorption tower with a heat recovery system, necessary to lower SO₂

emissions? Are these requested physical changes solely in this permit application request?

6. Please address prevention of significant deterioration (PSD) applicability to this proposed project. Does this project trigger PSD? {For PSD applicability in the State of Florida see Rule 62-212, Florida Administrative Code (F.A.C.)}
 - a. Will the capacity, tons per day (TPD) of 100% H₂SO₄, of each of the SAPs be changed under this project?
7. The Department requires a properly completed application form for the affected emission units, SAP Nos. 7, 8 & 9, specifically the Emissions Unit Information section [see Pages 15-28 of DEP Form No. 62-210.900(1) – Form, Effective 03/16/08]. The second page of Subsection A., Subsections B. - E. and Subsections H. - I. were not included for each SAP. The maximum production rate tons per day (TPD) of 100% H₂SO₄ for each SAP under this project must be included. The engineering design information to support the capacity, i.e., process design drawings and specifications, is requested. Please submit a completed application form.

Air Dispersion Modeling Items

8. The Department needs the input and output files for the exemption air dispersion modeling. Please send them to Mr. Tom Rogers.

Other Items

9. The Department requires a properly completed Owner/Authorized Representative Statement [Page 4 of DEP Form No. 62-210.900(1) - Form] for an AC permit application. The owner or authorized representative needs to sign this statement. The owner is typically a corporate officer or plant manager. A letter of authorization may be submitted by the owner to duly designate other persons.
10. Submit additional responses, any additional updates to the application and supporting documentation in quadruplicate as required by Rule 62-4.050(2), F.A.C.

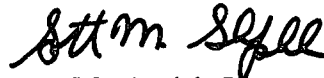
The Department will resume processing the application after receipt of the requested information. Rule 62-4.050(3), F.A.C. requires that all applications for a Department construction permit must be certified by a professional engineer (P.E.) registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. The requested items require a P.E. certification.

You are reminded that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

Request for Additional Information
Project Number 0570008-061-AC
Best Available Retrofit Technology Exemption Request
Riverview Facility
Page 4 of 4

We would be glad to meet with you and your staff to discuss this project. If you should have any questions, please contact me at 850/921-9532 or Mr. Tom Rogers regarding the air dispersion modeling items at 850/921-9554.

Sincerely,



Scott M. Sheplak, P.E.
Title V Section
Bureau of Air Regulation
Mail Station #5505
Scott.Sheplak@dep.state.fl.us

sms/tr

Enclosure

copy to: Jeff Stewart, Mosaic Fertilizer, LLC: jeff.stewart@mosaicco.com
Doug Thomas, Mosaic Fertilizer, LLC: Doug.Thomas@mosaicco.com
David A. Buff, P.E., Golder Associates Inc.: dbuff@golder.com
Sal Mohammad, Golder Associates Inc.: smohammad@golder.com
Syed Arif, P.E., DEP PSD NSR: Syed.Arif@dep.state.fl.us
Diana M. Lee, P.E., EPCHC: lee@epchc.org
Cindy Zhang-Torres, P.E., DEP SWD: Zhang-Torres@dep.state.fl.us
Katy R. Forney, U.S. EPA, Region 4: Forney.Kathleen@epamail.epa.gov
Dee Morse, National Park Service: Dee_Morse@nps.gov

Livingston, Sylvia

From: Lulf, Alan - Riverview [Alan.Lulf@mosaicco.com]
Sent: Wednesday, October 01, 2008 2:52 PM
To: Livingston, Sylvia
Subject: RE: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Yes, received and able to open files.

Thanks,
Alan

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, October 01, 2008 12:36 PM
To: Lulf, Alan - Riverview
Subject: FW: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Mr. Lulf,

I received a read receipt from your email provider, but I wanted to make sure that you were able to view the documents that were sent. Please respond to this email as verification that you were able to view the documents.

Thanks,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Livingston, Sylvia
Sent: Monday, September 15, 2008 5:05 PM
To: "
Subject: FW: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Mr. Lulf,

I received an undeliverable email notice when I sent this email last week because of a misspelling of your name. Please accept our apologies for this mistake.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

10/2/2008

From: Livingston, Sylvia
Sent: Wednesday, September 10, 2008 9:19 AM
To: 'alan.luff@mosaicco.com'; 'jeff.stewart@mosaicco.com'; 'Doug.Thomas@mosaicco.com'
Cc: 'dbuff@golder.com'; 'smohammad@golder.com'; Arif, Syed; 'lee@epchc.org'; 'Zhang-Torres@dep.state.fl.us'; 'Forney.Kathleen@epamail.epa.gov'; 'Dee_Morse@nps.gov'; Walker, Elizabeth (AIR); Sheplak, Scott

Subject: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <<http://www.adobe.com/products/acrobat/readstep.html>> .

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

<<0570008-061-AC letter.pdf>> <<0570008-055-AC BART - Figure A.pdf>>

Livingston, Sylvia

From: Lulf, Alan - Riverview [Alan.Lulf@mosaicco.com]
Sent: Sunday, September 21, 2008 9:32 PM
To: undisclosed-recipients
Subject: Read: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Attachments: ATT1311581.txt



ATT1311581.txt
(303 B)

Your message

To: Lulf, Alan - Riverview
Cc:
Subject: FW: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)
Sent: Mon, 15 Sep 2008 17:04:42 -0400

was read on Sun, 21 Sep 2008 21:31:44 -0400

Livingston, Sylvia

From: Stewart, Jeff M - Riverview [Jeff.Stewart@mosaicco.com]
Sent: Wednesday, September 10, 2008 10:26 AM
To: Livingston, Sylvia
Subject: RE: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Received.

Jeff Stewart
Environmental Superintendent
Mosaic Riverview / Big Bend
813-671-6369 (office)
863-860-1068 (cell)
jeff.stewart@mosaicco.com

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, September 10, 2008 9:19 AM
To: alan.luff@mosaicco.com; Stewart, Jeff M - Riverview; Thomas, Doug - New Wales
Cc: dbuff@golder.com; smohammad@golder.com; Arif, Syed; lee@epchc.org; Zhang-Torres@dep.state.fl.us; Forney.Kathleen@epamail.epa.gov; Dee_Morse@nps.gov; Walker, Elizabeth (AIR); Sheplak, Scott
Subject: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

<<0570008-061-AC letter.pdf>> <<0570008-055-AC BART - Figure A.pdf>>

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

9/10/2008

Livingston, Sylvania

From: Dee_Morse@nps.gov
Sent: Wednesday, September 10, 2008 11:27 AM
To: Livingston, Sylvania
Subject: Re: RAI -0570008-061-AC (Mosaic Fertilizer, LLC Riverview Facility)

Documents received

Dee Morse
Environmental Protection Specialist
Air Resources Division
Natural Resource Program Center
National Park Service
Phone: 303 969-2817
Fax: 303 969-2822
e-mail: dee_morse@nps.gov

"Livingston,
Sylvania"
<Sylvia.Livingsto
n@dep.state.fl.us
>

09/10/2008 09:19
AM AST

<alan.luff@mosaicco.com>,
<jeff.stewart@mosaicco.com>,
<Doug.Thomas@mosaicco.com>

To

cc

<dbuff@golder.com>,
<smohammad@golder.com>, "Arif,
Syed" <Syed.Arif@dep.state.fl.us>,
<lee@epchc.org>,
<Zhang-Torres@dep.state.fl.us>,
<Forney.Kathleen@epamail.epa.gov>,
<Dee_Morse@nps.gov>, "Walker,
Elizabeth \ (AIR\)"
<Elizabeth.Walker@dep.state.fl.us>,
"Sheplak, Scott"
<Scott.Sheplak@dep.state.fl.us>

Subject

RAI -0570008-061-AC (Mosaic
Fertilizer, LLC Riverview Facility)

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