

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

October 31, 2008

Electronic Mail - Received Receipt Requested david.jellerson@mosaicco.com

Mr. David B. Jellerson Assistant Vice President - Environmental Mosaic Fertilizer, LLC. Post Office Box 2000 Mulberry, Florida 33860

Re: DEP File No. 1050059-061-AC

Best Achievable Retrofit Technology Exemption Application

Mosaic - New Wales Plant

Dear Mr. Jellerson:

On October 3, 2008, the Department received a Best Available Retrofit Technology (BART) exemption request in the form of an air construction permit application for the New Wales Facility. This existing facility is located in Polk County at 3095 Highway 640, Mulberry.

Pursuant to Rules 62.296.340, 62-4.055, and 62-4.070 F.A.C., Permit Processing, the Department requests submittal of additional information prior to processing the application. Should your 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.

- 1. As indicated in your BART exemption application on Page 2-6, under scenario A, Mosaic is proposing to shut down the Multifos A and B Kilns and their respective coolers. The reduction in particulate matter (PM) emissions resulting from these shutdowns total 36.2 pounds per hour (lb/hr), the reduction in sulfur dioxide (SO₂) emissions is 316 lb/hr, the reduction in nitrogen oxides (NOx) emissions is 45.7 lb/hr and the reduction in sulfuric acid mist (SAM) emissions is 4.2 lb/hr. Please provide to the Department information on how the reduction in emissions in lb/hr for the various pollutants were arrived at. Submit any test data or other supporting documents to validate these emission reductions.
- 2. On Page 2-8 of the BART exemption application, the amount of standard vanadium catalyst listed for Sulfuric Acid Plant (SAP) No. 1 and 2 is listed as 610,000 liters. The Haldor Topsoe summary for reactor calculations at the end of the application lists a different volume for each of the two SAPs. Please explain the discrepancy.
- 3. Please provide information on what kind (brand name and type) of catalyst does the converter for each of the three SAPs currently contain. Also, indicate the amount that each bed of those converters

currently holds? The application indicates that standard vanadium catalyst loading will be increased in the three SAPs. Please specify the type of standard catalyst that will be used.

- 4. Page 2-9 of the BART exemption application refers to Mosaic determining that it is more cost-effective to use a larger catalyst volume with standard catalyst versus using cesium catalyst. Please provide the cost-effectiveness information to validate the claim.
- 5. Page 2-13 of the BART exemption application indicates that SAP No. 1 has achieved 90 percent or more of the proposed maximum production rate of 3,200 tons per day (TPD) on 453 days between May 2004 (date of converter replacement) and September 1, 2008. The Department determined that this equates to less than 30 percent of the available time from May 2004 to September 1, 2008. Similarly, SAP No. 3 has operated even less percent of the available time compared to SAP No. 1. The application claims that the purpose for all the physical changes is to meet lower SO₂ emission limits and not to increase the production rates. What reasonable assurance can the applicant provide that both of these SAPs can operate at 3,200 TPD on a consistent basis?

We will forward any comments received from other agencies as soon as we receive them. 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. Permit applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days.

We will be happy to meet and discuss the details with you and your staff. I may be contacted at 850/921-9528. You may discuss the modeling requirements with Mr. Tom Rogers at 850/921-9554.

Sincerely,

Sved Arif, P.E.

New Source Review Section

/sa

cc: Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

Heather Abrams, U.S. EPA Region 4 (abrams.heather@epamail.epa.gov)

David Turley, Mosaic Fertilizer (<u>david.turley@mosaicco.com</u>)

Catherine Zhang-Torres, DEP-SWD (cindy.zhang-torres@dep.state.fl.us)

David Buff, P.E., Golder Associates Inc. (dbuff@golder.com)

Tom Rogers, DEP-OPAPM (tom.rogers@dep.state.fl.us)

Vicki Gibson, DEP-BAR (victoria.gibson@dep.state.fl.us) (for read file)

Livingston, Sylvia

From:

Buff, Dave [DBuff@GOLDER.com]

Sent:

Saturday, November 01, 2008 11:21 AM

To:

Livingston, Sylvia

Subject:

RE: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

David A. Buff, P.E., Q. E. P.

Golder Associates Inc. Phone: (352)336-5600 x 545

Phone: (352)336-5600 x 545 Fax: (352)336-6603 Mc

Mobile: (352)514-5600

E-Mail: dbuff@golder.com

Disclaimer Notice:

This e-mail transmission is confidential and may contain proprietary information for the express use of the intended recipient. Any use, distribution or copying of this transmission, other than by the intended recipient, is strictly prohibited. If you are not the intended recipient, please notify the sender and delete all copies. Electronic media are susceptible to unauthorized modification, deterioration, and incompatibility. Accordingly, the electronic media version of any work product may not be relied upon.

----Original Message----

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

Sent: Friday, October 31, 2008 1:13 PM

To: david.jellerson@mosaicco.com

Cc: forney.kathleen@epa.gov; abrams.heather@epamail.epa.gov; david.turley@mosaicco.com; Zhang-Torres; Buff, Dave; Rogers, Tom; Gibson, Victoria; Walker, Elizabeth (AIR); Arif, Syed

Subject: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

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, noting that you can view the documents, 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 <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

Walker, Elizabeth (AIR)

From:

Jellerson, David - Pierce [David.Jellerson@mosaicco.com]

Sent:

Friday, October 31, 2008 1:23 PM

To:

Livingston, Sylvia

Subject:

RE: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

This is to confirm that I received and am able to view the document.

David Jellerson | Assistant Vice President, Environmental Mosaic Fertilizer, LLC | P.O. Box 2000 | 5000 Old Hwy 37 S. | Mulberry, Florida 33860 P: 863.428.6480 | C: 813.781.2029 | E: david.jellerson@mosaicco.com | W: www.mosaicco.com

This communication may contain information that is legally privileged, confidential or exempt from disclosure. If you are not the intended recipient, please note that any dissemination, distribution, or copying of this communication is strictly prohibited. Anyone who receives this message in error should notify the sender immediately by telephone or by return e-mail and delete it from his or her computer.

----Original Message----

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

Sent: Friday, October 31, 2008 1:13 PM

To: Jellerson, David - Pierce

Cc: forney.kathleen@epa.gov; abrams.heather@epamail.epa.gov; Turley, Charles D - New Wales;
Zhang-Torres; dbuff@golder.com; Rogers, Tom; Gibson, Victoria; Walker, Elizabeth (AIR); Arif,
Sved

Subject: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

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, noting that you can view the documents, 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

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. Copy the url below to a web browser to complete the DEP

survey:

http://survey.dep.state.fl.us/?refemail=Sylvia.Livingston@dep.state.fl.u
s Thank you in advance for completing the survey.

Walker, Elizabeth (AIR)

From:

Turley, Charles D - New Wales [David.Turley@mosaicco.com]

Sent:

Friday, October 31, 2008 2:46 PM

To:

undisclosed-recipient's

Subject:

Read: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

Attachments:

ATT1080624.txt

Your message

To:

Jellerson, David - Pierce

Cc:

forney.kathleen@epa.gov; abrams.heather@epamail.epa.gov;

Turley, Charles D - New Wales; Zhang-Torres; dbuff@golder.com; Rogers, Tom; Gibson, Victoria;

Walker, Elizabeth (AIR); Arif, Syed

Subject: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

Sent: Fri, 31 Oct 2008 13:12:33 -0400

was read on Fri, 31 Oct 2008 14:46:18 -0400

Livingston, Sylvia

From:

Abrams.Heather@epamail.epa.gov

Sent:

Monday, November 03, 2008 7:54 AM

To:

Livingston, Sylvia

Subject:

Re: RAI -1050059-061-AC (Mosaic Fertilizer, LLC-New Wales Plant)

Thanks! Heather Abrams Air Permits Section U.S. EPA - Region 4 61 Forsyth St. SW Atlanta, Georgia 30303

Phone: 404-562-9185 Fax: 404-562-9019