



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

July 23, 2010

Electronic Mail - Received Receipt Requested

Mr. Rama Iyer
Permitting Engineer
Mosaic Fertilizer, LLC
Post Office Box 2000
Mulberry, Florida 33860

Re: DEP File No. 1050059-066-AC
Multifos C Kiln – Methods of Operation
New Wales Plant

Dear Mr. Iyer:

On June 28, 2010, the Department received your response to our Request for Additional Information (RAI) letter dated March 30, 2010, concerning your application for alternate methods of operation for Multifos Kiln C at the New Wales Plant in Polk County.

The application is still incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to the item below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Table 1 indicates NOx emissions data for tests conducted between 9/17/2002 through 10/20/2009. The table also includes NOx emissions data due to fuel combustion based on AP-42 factors. The data indicates that the test measured NOx emissions have always been higher when compared with NOx emissions based on the AP-42 factors except for the 8/12/2009 test date. In fact, the average of the test NOx emissions are 53 percent higher than the average of the NOx emissions based on AP-42 factors. If this adjustment is made to the maximum annual NOx calculated using AP-42 factors and realizing that NOx emissions due to dump chute method of operation will be higher for the requested 500 hours, the 40 tons per year threshold of NOx being a PSD pollutant can be easily exceeded. In order to have reasonable assurance that the PSD threshold is not exceeded, the Department shall require the installation of a NOx continuous emission monitor system (CEMS) if the alternate methods of operation are to be approved. Please provide the vendor and cost information for the purchase and installation of such a system.

2. The video clips of the dump chute operation submitted in your response were done when the kiln was down. Please clarify if the dump chute operation is being utilized now while the kiln is operating. If it is being utilized, please provide video clips of the dump chute operation while the kiln is operating. The Department would like to get a sense of fugitive emissions taking place during dump chute operation.
3. A warning letter (WL08-0044AS53SWD) was issued on June 24, 2010, regarding possible violations of steam to fuel ratios under normal operating conditions versus compliance testing conditions. Please provide data of steam to fuel ratios (lb/hr per cfm or gal/hr for oil) in a graphical form including the kiln production rate (tons per hour) on the same chart to the Department for a two year period (July 2008 – June 2010). The time scale should at least be a weekly average. Indicate on the chart if the kiln was operating under normal operating conditions or under dump chute operating conditions.
4. Please provide copy of the engineering study conducted by Mosaic which indicated the ratio of two key parameters (steam and fuel flow) appears to provide a basis for predicting NO_x emissions. Provide all the empirical data considered in the engineering study as well as any other data that was relied upon to determine an initial minimum steam to fuel ratio for normal operation, dump chute operation and hot/cold startup method of operation.
5. Please provide copies of the June 26, 2008 test report to the Department and Southwest District Office. The special test was conducted for NO_x measurements under normal and dump chute operation.
6. The response to our previous request for providing a marked up version of the existing synthetic minor source construction permit (1050059-024-AC) is inadequate. The applicant is not only requesting two methods of operation (1) the dump chute method operation and (2) hot/cold startup method of operation, but is also requesting to monitor and record the steam and fuel flow. Additionally, the applicant will be establishing minimum indicator values of the steam to fuel ratios during normal operation, dump chute and hot/cold startup operations. The NO_x emission rates will be different under the dump chute method of operation which will require additional testing unless NO_x CEMS is installed. Therefore, considering all these changes, please provide a marked up version of the existing synthetic minor source permit with the changes mentioned above.

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 me at 850/921-9580. Please note that I am now the Administrator for the Emissions Monitoring Section in the Bureau of Air Monitoring

Mr. Rama Iyer
July 23, 2010
Page 3 of 3

and Mobile Sources (BAMMS) and have included my new telephone number. I will continue to work on this project until completion.

Sincerely,



Syed Arif, P.E., Administrator
Emissions Monitoring Section
BAMMS

cc: Rama Iyer, Mosaic Fertilizer, LLC: rama.iyer@mosaicco.com
Mara Nasca, DEP-SWD: mara.nasca@dep.state.fl.us
Cindy Zhang-Torres, DEP-SWD: cindy.zhang-torres@dep.state.fl.us
Pradeep Raval, Koogler & Associates, Inc.: praval@kooglerassociates.com
Vickie Gibson, DEP-BAR: victoria.gibson@dep.state.fl.us (for read file)

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Friday, July 23, 2010 12:29 PM
To: 'rama.iyer@mosaicco.com'
Cc: 'mara.nasca@dep.state.fl.us'; 'cindy.zhang-torres@dep.state.fl.us';
'praval@kooglerassociates.com'; 'victoria.gibson@dep.state.fl.us'; 'Syed.Arif@dep.state.fl.us';
'elizabeth.walker@dep.state.fl.us'
Subject: RAI: Mosaic Fertilizer, LLC - New Wales Plant (1050059-066-AC)
Attachments: RAI 1050059-066-AC_072310.pdf

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
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9561
sylvia.livingston@dep.state.fl.us

Tracking:

Livingston, Sylvia

From: Iyer, Rama - FishHawk [Rama.Iyer@mosaicco.com]
Sent: Saturday, July 24, 2010 1:35 PM
To: Livingston, Sylvia
Subject: RE: Mosaic Fertilizer, LLC - New Wales Plant (1050059-066-AC)

Sylvia,

I am confirming that I am able to retrieve and view the subject document.

Thanks,

Rama Iyer

Mosaic Fertilizer, LLC

13830 Circa Crossing Drive

Lithia, FL 33547

813-500-6478

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Friday, July 23, 2010 12:29 PM
To: Iyer, Rama - FishHawk
Cc: Nasca, Mara; Zhang-Torres; praval@kooglerassociates.com; Gibson, Victoria; Arif, Syed; Walker, Elizabeth (AIR)
Subject: RAI: Mosaic Fertilizer, LLC - New Wales Plant (1050059-066-AC)

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
Division of Air Resource Management (DARM)
Department of Environmental Protection
850/921-9561
sylvia.livingston@dep.state.fl.us