



Mosaic Fertilizer, LLC
13830 Circa Crossing Drive
Lithia, FL 33547

RECEIVED

AUG 12 2013

DIVISION OF AIR
RESOURCE MANAGEMENT

August 9, 2013

Mr. Scott M. Sheplak, P.E.
FDEP, DARM
Office of Permitting & Compliance
2600 Blair Stone Road, Mail Station # 5505
Tallahassee, Florida 32399-2400

Re: RAI dated May14, 2013
New Wales BART Permit Revision
FDEP Project No. 1050059-083-AV

Dear Mr. Sheplak:

With respect to your letter dated May 14, 2013 on the referenced matter, Mosaic is pleased to provide the additional information requested. Your RAI questions and narrative are reproduced, for ease of reference, in italics per your numbering and our responses follow below in upright font.

1. *Has compliance with all of the specific terms and conditions of the escape-BART (Best Available Retrofit Technology) permit, Permit No. 1050059-061-AC, been demonstrated? [Rule 62-210.3000(2), Air Operation Permits – Demonstration of Compliance, F.A.C.]*

Yes, compliance with all specific terms and conditions of 1050059-061-AC has been demonstrated, commencing with our December 21, 2009 letter to your office notifying you of Mosaic implementing Scenario A, followed by the February 26, 2010 letter providing a submittal of a summary of construction milestones and so on. These documents and Table A, summarizing required compliance tests, are provided in Attachment A included with this RAI response.

2. *What was the date of shutdown of the E.U. ID No. 036 (Multifos A and B Kilns including associated coolers)? [Rule 62-210.3000(2), Air Operation Permits – Demonstration of Compliance, F.A.C.]*

The date of shutdown or the last day of production, of Multifos A Kiln and associated cooler (EU-032) was 9/20/2011 and of Multifos B Kiln and associated cooler (EU-033) was 9/25/2011. Please also note that the Multifos C Kiln was shutdown on 1/31/2012.

3. *Under both scenarios in Permit No. 1050059-061-AC, compliance testing was required to demonstrate compliance with existing and/or new air pollutant emission standards with some due dates for testing up to April 30, 2013. The Department is unable to find where this has been included or referenced in the permit application. For example, on page 29 for the SAP No. 1 the "Compliance Demonstration Reports/Records" referenced in item 6 of the permit application form refers to "Att. 2." The Attachment 2 document included: a "Facility Plot Plan," "Process Flow Diagrams" and "Precautions to Prevent Emissions of Unconfined Particulate Matter."*

The Attachment 3 document is labeled as "Compliance Demonstration 2012, Statement of Compliance." Review of the Attachment 3 document shows that this document is comprised of compliance statements, not compliance test results completed under Permit No. 1050059-061-AC. Please provide a summary of the compliance test results completed under Permit No. 1050059-061-AC. Be sure to include the air pollutant standard compared to the actual test results in the summary. [Rule 62-210.3000(2), Air Operation Permits – Demonstration of Compliance, F.A.C.]

As mentioned in response 1, Table A is a summary of the stack tests completed to demonstrate compliance with the emissions standards specified in and per the compliance test schedule in 1050059-061-AC and is being provided in Attachment A included with this RAI response.

4. *The New Wales facility has 5 sulfuric acid plants, 3 of which were affected under the escape-BART permit, Permit No. 1050059-061-AC. In the referenced Title V air operation permit revision application received on April 1, 2013, Table 2 (copy enclosed) within Attachment 1 shows work activities like increased catalyst loading ratios that Mosaic has already completed at sulfuric acid plant (SAP) Nos. 1, 2 & 3. As discussed at the April 24, 2013 meeting, Mosaic needs to submit a request for an air construction permit modification of Permit No. 1050059-061-AC for normalizing work activities already completed between scenarios A and B under Permit No. 1050059-061-AC. [Rules 32-210.300(1), Permits Required – Air Construction Permits, F.A.C. and 62-212-300(1)(a), General Preconstruction Review Requirements – General Prohibitions, F.A.C.]*

Mosaic wishes to clarify that the Table 2 catalyst loading information with completion dates of January 2012, June 2011 and January 2010 for SAPs 1, 2 and 3 respectively in the third column of the table relates to the addition of catalyst customarily associated with sulfuric acid plant turnarounds. The alignment of the status completion dates with work activities from Scenario B catalyst loading ratios and volumes in the table is incidental simply due to our intention of documenting the installation of HRS, Brownian diffusion type candles, sulfur furnace, waste heat boilers, economizers, superheaters and so on in the table. A revised Table 2A showing this clarification, is provided with this RAI response. As it can be seen from this revised table, the added catalyst volumes are not, we repeat, are not those volumes listed for SAPs 1, 2 and 3 in the Scenario B tabulation in the escape-BART permit. As such, Mosaic would like to respectfully say, as discussed in the June 14, 2013 meeting at your office, that no 'increased catalyst loading ratio work activities' were completed. To reiterate, only additions of catalyst customary with sulfuric acid turnarounds was completed. With respect to the matter of normalizing scenarios A and B, Mosaic has reviewed our related correspondences to you dated February 9 and April 7 of 2011 and your response dated May 20, 2011 and wish to say that the status completion date information provided in Table 2 is in keeping with your statement in your May 20, 2011 letter that the documented HRS, economizer, superheater etc., completions are activities consistent with meeting the emissions reductions for SAPs 1, 2 and 3 per the intent and purpose of the BART permit. In view of the foregoing, and, as discussed and communicated to you in the June 14, 2013 meeting, an air construction permit modification of Permit No. 1050059-061-AC is not needed and Mosaic will thus not be submitting one.

5. *Also, as discussed at the April 24, 2013 meeting, Mosaic may submit a request to incorporate any applicable requirements from the pending air construction permit, Project No. 1050059-082-AC, being processed by Mr. Quaid Noor in the SWD office into the Title V air operation permit revision Project Number 1050059-083-AV.*

Any work activities that have not been completed under Project No. 1050059-082-AC may be included in the revision Project Number 1050059-083-AV, however, the Department would need a compliance plan to include those in the revision project.

[Rules 62-210.3000(2), Air Operation Permits – Demonstration of Compliance, F.A.C. and 62-213.440(2), Compliance Plan, F.A.C.].

Mosaic is not submitting a request to incorporate any requirements from air construction permit 1050059-082-AC issued by the SWD office into this Title V air operation permit revision Project Number 1050059-083-AV.

Please note that we are requesting that 1050059-072-AC, Replacement of filter/receiver for AFI Silica Storage Bin (EU-026) is incorporated in this revision. Also, some of the BART revisions listed in this application have been referenced in the most recent Title V permit revision, viz. 1050059-075-AV; we are listing these already addressed items simply for the sake of being complete with respect to the escape-BART permit.

If you have any questions, please feel free to contact me at (813) 500-6478.


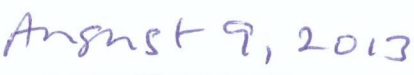

Sincerely,



Rama Iyer, P.E.
Senior Engineer
Environmental Affairs

cc: R. Yasurek, G. Baig, D. Turley, S. David / Mosaic
P. Raval / Koogler

APPLICATION INFORMATION

1. Professional Engineer Name: Rama Iyer Registration Number: 56919
2. Professional Engineer Mailing Address... Organization/Firm: Mosaic Street Address: 13830 Circa Crossing Drive City: Lithia State: FL Zip Code: 33547
3. Professional Engineer Telephone Numbers... Telephone: (813) 500 - 6478 Fax: (813) 571- 6908
4. Professional Engineer E-mail Address: rama.iyer@mosaicco.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> (1) <i>To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> (2) <i>To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> (4) <i>If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> (5) <i>If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  <hr style="width: 100%; border: 0.5px solid black;"/> <p>Signature</p> </div> <div style="text-align: center;">  <hr style="width: 100%; border: 0.5px solid black;"/> <p>Date</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>(seal)</p> </div>

* Attach any exception to certification statement.

Attachment A

Compliance Letters

Table A – Summary of Compliance Tests

Table 2A – Revision of previously submitted Table 2



Mosaic Fertilizer, LLC
P.O. Box 2000
Mulberry, FL 33860

December 21, 2009

VIA: CERTIFIED MAIL: 7008 2810 0001 9928 3783

Trina L. Vielhauer, Chief
Bureau of Air Regulation
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Mosaic Fertilizer, LLC – New Wales Facility
BART Exemption Permit No. 1050059-061-AC

Dear Ms. Vielhauer:

Pursuant to the requirements of Section 3, Subsection A, Administrative Requirements, item 1, of the referenced permit, Mosaic is hereby notifying you that it is implementing Scenario A. Under Scenario A, Mosaic will shutdown EU-036 (Multifos A and B Kilns), including the associated coolers, EU-032 (Multifos A kiln cooler) and EU-033 (Multifos B kiln cooler) as expeditiously as practicable after January 1, 2010, but no later than June 30, 2013.

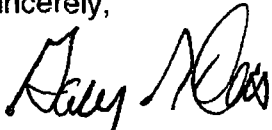
Mosaic will therefore, as required by Section 3, Subsection A, Administrative Requirements, item 22, of the referenced permit, submit within sixty (60) days of January 1, 2010, a Construction Plan providing milestones and schedule dates of sulfuric acid plant acid mist control pollution control modifications and or additions to comply with the permit BART exemption determination.

Mosaic also acknowledges that under Scenario A, the existing design capacity of each sulfuric acid plant (SAP), diammonium phosphate (DAP) plant No. 1, monoammonium phosphate (MAP) plant and the animal feed ingredient (AFI) plant shall not be changed as a result of work authorized by the referenced permit and thus remain 3,400 tons per day of 100% sulfuric acid for each of the three sulfuric acid plants, 150 tons per hour of MAP or DAP for DAP Plant No. 1,

50 tons per hour of MAP for the MAP Plant and 120 tons per hour for the AFI Plant.

Mosaic will implement Scenario A following the conditions and requirements of the referenced permit.

Sincerely,



Gary N. Davis
Vice President
Phosphate Operations

c: Mara G. Nasca \ FDEP, SW District Office *VIA CERTIFIED MAIL: 7008 2810 0001 9928 3776*
T. Fuchs, D. Jellerson, D. Jagiella \ Mosaic
M. Daigle, D. Ahrens, J. Voyles, R. Iyer \ Mosaic
D. Buff \ Golder
S. Arif \ FDEP, Tallahassee
R. Manning \ Hopping Green



Mosaic Fertilizer, LLC
 13830 Circa Crossing Drive
 Lithia, FL 33547

February 26, 2010

Trina L. Vielhauer, Chief
 Bureau of Air Regulation
 Department of Environmental Protection
 2600 Blair Stone Road
 Tallahassee, Florida 32399-2400

Re: Mosaic Fertilizer, LLC - New Wales Facility
 Air Permit Number 1050059-061-AC
 Construction Plan

Dept. of Environmental
 Protection
 FEB 26 2010
 Southwest District

Dear Ms. Vielhauer:

This submittal is made pursuant to Section 3, Subsection A, item 22, of the above referenced permit. Shown below is a summary of construction milestones designed to comply with the permit. It includes necessary action items and schedule dates.

SAP No.	Work Activity	Target Date
1	Install Brownian diffusion-type candles or approved equivalent control technology to comply with SAM emission limits in final absorption tower	January, 2012
2	Install Brownian diffusion-type candles or approved equivalent control technology to comply with SAM emission limits in final absorption tower	June, 2011

If you have any questions, please feel free to contact Rama Iyer at (813) 500-6478.

Sincerely,

Gary N. Davis
 Vice President
 Phosphate Operations

→ c: M. Nasca \ FDEP SW District Office
 T. Fuchs, D. Jellerson, D. Jaglella \ Mosaic
 M. Daigle, D. Ahrens, J. Voyles, R. Iyer \ Mosaic
 D. Buff \ Golder, R. Manning \ Hopping Green
 S. Arif \ FDEP Tallahassee

Table A : Summary of Compliance Tests							
EU No. / Description	Test Date	Pollutant					
		NO _x , lb/hr		SAM, lb/hr		VE, %	
		Measu red	Allowable	Measured	Allowable	Measured	Allowable
-002 SAP1	3/15/12	8.3	17.0	2.5	7.1	0	10
-003 SAP2	8/25/11	10.3	17.0	2.0	7.1	0	10
-004 SAP3	9/1/11	6.2	17.0	3.8	7.1	0	10
		PM, lb/hr					
		Measured	Allowable				
-009 DAP1	1/26/12	5.2	15.0				
-011 MAP1	3/15/12	0.4	7.0				
-027 AFI Granulation Plant	12/7/11	31.4	36.8				
-036 Multifos	<i>Shutdown per Scenario A</i>						
		PM, lb/hr		VE, %			
		Measured	Allowable	Measured	Allowable		
-026 AFI Silica Storage Bin	5/16/12	0.03	1.6	0	20		

Table 2A. Completed construction activities for revision to 10500059-075-AV

BART Permit Work Activities (1050059-061-AC)

EU	Scenario A	Turnaround Work/Other permits
002 (SAP 1)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H ₂ SO ₄ . Complete. Include this limit in Title V permit.	
	Jan 2012 – Installed Brownian diffusion candles	Catalyst washed, screened and replaced. Slight increase in catalyst volume (533,704 liters vs 501,500 liters) Replaced Waste Heat Boiler2, Economizer 3B, Superheater OA
003 (SAP 2)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H ₂ SO ₄ . Complete. Include this limit in Title V permit.	
	Jun 2011 – Installed Brownian diffusion candles	Catalyst washed, screened and replaced. Slight decrease in catalyst volume (543,600 liters vs 553,400 liters) Replaced Economizer 3B, Superheater OA, silencer
004 (SAP 3)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H ₂ SO ₄ . Complete. This limit is already included in the current Title V permit (1050059-075-AV)	
	Brownian diffusion candles installed prior to BART exemption permit; no construction requirements in BART exemption permit	Catalyst washed, screened and replaced. Slight increase in catalyst volume (554,804 liters vs 545,400 liters) Replaced Waste Heat Boilers 1&2, Economizer 3B, Superheater OA, stack repairs

AFI Silica Storage and Unloading – 1050059-072-AC expires 12/31/2013

026 AFI	Replace the filter/receiver for the AFI Silica Storage Bin	Completed March 2012
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