

Mosaic Fertilizer, LLC 8813 Highway 41 South Riverview, FL 33569 www.mosaicco.com

Certified Mail 7003 2260 0004 7571 4808

September 29, 2006

Florida Department of Environmental Protection Bureau of Air Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 RECEIVED
OCT 02 2006

BUREAU OF AIR REGULATION

Attention: Syed Arif, P.E., Air Permit Engineer

RE: DEP FILE NO. 0570008-053-AC; PSD-FL-315G

MOSAIC Fertilizer LLC. – ANIMAL FEED INGREDIENT PLANT MODIFICATION

Dear Mr. Arif:

On February 23, 2006, Mosaic Fertilizer, LLC (Mosaic) submitted an Air Construction Permit application to the Florida Department of Environmental Protection (FDEP) to modify Permit No. 0570008-043-AC; PSD-FL-315D to accommodate modifications to the Animal Feed Ingredient (AFI) Plant at their facility located in Riverview, Florida. This application described three proposed enhancements to the AFI Plant:

- 1. Upgrade of the Defluorination Scrubber by increasing the horsepower of the fan to recapture air flow lost when the venturi was installed in 2005,
- 2. Upgrade of the Limestone Handling Operation by increasing the unloading capacity of the East Limestone Unloading System;
- 3. Conversion of an existing phosphoric acid tank into a defluorinated acid tank to allow for independent operation of the defluorinated acid system and the AFI Plant.

On June 6, 2006, Mosaic received a request for additional information (RAI) from the Department. Mosaic responded to the RAI with a letter to the Department dated June 27, 2006. On July 31, 2006, Mosaic received a second RAI from the Department. Additionally, Mosaic received an RAI from the Environmental Protection Commission of Hillsborough County (EPC), dated July 28, 2006. The purpose of this letter is respond to these RAIs.

Mosaic has recently decided to reduce the scope of their Air Construction Permit Application to include only the upgrade of the fan for the Defluorination Scrubber. This change in direction will be reflected in Mosaic's responses to the RAIs. Mosaic will address EPC's RAI first since it contends that the proposed project should be permitted under Prevention of Significant Deterioration (PSD) regulations, an issue with significant ramifications to permitting of the project, and an issue which was not addressed in the Department's RAI. Responses to EPC are presented in the same order as in their RAI.

EPC Nos. 1 and 2: EPC contends that the AFI Plant began "normal" operations some time ago, and therefore, for purposes of determining the applicability of PSD regulations, Mosaic cannot assume that actual annual emissions are equivalent to potential emissions. The Department issued Permit No. 057-008-43-AC; PSD-FL-315D on February 4, 2004 for modifications to the AFI. Among other things, this permit allowed the installation of a venturi scrubber to control emissions from the defluorination system. Installation of this scrubber was completed in May 2005. Rule 62-210.200(205) defines a new emissions unit as an emissions unit which is not in existence, for which an application for a permit to construct has not been submitted before the effective date of an applicable section or provision. For the purposes of Rule 62-212.400 (PSD), a new emissions unit is any emission unit that is or will be newly constructed and that has existed for less than 2 years from the date of beginning normal operation. This definition, as it applies to PSD applicability, distinguishes between initial construction and "newly constructed" for new emission units. In this context, the AFI Plant can be considered a new emissions unit.

Rule 62-210.200(11)(a) defines actual emissions as of a particular date to be the average rate, in tons per year, of the two-year period which proceeds the selected date. Rule 62-210.200(11)(c) further specifies that actual emissions shall be assumed to be equal to potential emissions for emissions units which have not begun normal operations on a particular date. Since installation of the scrubber was not completed until May 2005, and production of the facility was affected by its installation, there have not been two years of operational history for the AFI Plant on which to base actual emissions.

EPC further contends that increasing the efficiency of the packed-bed scrubber and conversion of a phosphoric acid tank into a defluorinated acid tank will result in a "debottlenecking" of the AFI Plant. While Mosaic does not agree that either of these projects would result in a debottlenecking of the facility beyond the production rates already permitted in the PSD permits for the AFI Plant, as previously indicated, Mosaic will not be proceeding with conversion of a phosphoric acid storage tank into a defluorinated acid tank. As for upgrading the fan for the scrubber, Mosaic is only attempting to recapture the evacuation air flow lost in the defluorination system when the venturi scrubber was installed.

Mosaic does anticipate that this project will increase production of defluorinated acid, but not beyond those production rates already permitted in the PSD permits for the AFI Plant. Potential "debottlenecking" of the Riverview facility was already addressed in the PSD applications for the AFI Plant. These PSD permit applications addressed impacts on ambient air quality and PSD increments (including fugitive emissions from road traffic); as well as, analyses of best available control technology (BACT), and debottlenecking of both upstream and downstream sources. Since impacts on ambient air quality, PSD increments, and BACT will not change as a result of this project, which now involves only upgrading the scrubber fan to recapture the air flow already permitted, revising the PSD Permit again is unnecessary.

EPC No. 3: Mosaic provides reasonable assurance to the agencies that the AFI Plants are operated in compliance. We do this with annual stack tests along with monitoring of operations as outlined in the Title V Permit. We will continue to test the plant in accordance with all permit conditions and always attempt to test at maximum capacity. Specific Condition No. 8 describes protocols and procedures to follow if the plant becomes rate limited. Through years of emission tests, we have demonstrated that the control equipment provides effective capture and transport velocities. While we acknowledge that there was some product buildup in AFI No. 1 during the May 25, 2006 inspection, it is important to note that no visible dust was noted exiting the building. We have policies and procedures to ensure that fugitive or unconfined emissions are minimized. Reasonable precautions are adhered to as described in Condition No. 57 of Appendix TV-5 of the Title V Permit. Mosaic will continue to

examine process improvements to reduce fugitives and product buildup in our plants and will take actions necessary to maintain compliance.

The following are responses to FDEP's RAI. Similarly, they are enumerated as in FDEP's RAI:

- 1. The revised process flow diagram is presented in Attachment No. 1.
- 2. Also attached is a PE sealed statement as requested.
- 3. Since Mosaic is no longer pursuing conversion of a phosphoric acid storage tank into a defluorinated acid tank, this information was not provided.

If you have any further questions or need additional information, please contact me at 813-671-6369. As we have discussed, this project remains of great importance to Mosaic and we wish to avoid any delays in obtaining the permit. Thank you for your cooperation and attention in this matter and throughout the permitting process.

Sincerely,

Jeffrey M. Stewart

Environmental Superintendent

Mey M. Stewn

Mosaic Riverview

Cc:

Mara Nasca, FDEP-SW District 7003 2260 0004 7571 4815 Diana Lee, EPCHC 7003 2260 0004 7571 4822 Scott McCann – Golder Associates

P05-1

## **Owner/Authorized Representative Statement**

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name:

Mr. Jeff Stewart, Environmental Superintendent

2. Owner/Authorized Representative Mailing Address...

Organization/Firm: Mosaic Fertilizer, LLC

Street Address: 8813 U.S. Highway 41 South

City: Riverview

State: FL

Zip Code: **33569** 

3. Owner/Authorized Representative Telephone Numbers...

Telephone: (863) 671-6369

ext.

Fax: (863) 671-6149

4. Owner/Authorized Representative Email Address: jeff.stewart@mosaicco.com

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

Signature

9/29/06

Date

DEP Form No. 62-210.900(1) – Form Effective: 06/16/03

Pr	ofessional Engineer Certification
1.	Professional Engineer Name: Scott A. McCann
	Registration Number: 54172
2.	Professional Engineer Mailing Address
	Organization/Firm: Golder Associates Inc.**
	Street Address: 6241 NW 23 <sup>rd</sup> Street, Suite 500
	City: Gainesville State: FL Zip Code: 32653
3.	Professional Engineer Telephone Numbers
	Telephone: (352) 336-5600 ext. Fax: (352) 336-6603
4.	Professional Engineer Email Address: smccann@glolder.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) 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
	(2) 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.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here $\square$ , 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.
	(4) If the purpose of this application is to obtain an air construction permit (check here $\boxtimes$ , 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 $\square$ , 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.
	(5) 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 , 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.
	Signature Date

\* Attach any exception to certification statement. (See Attached).

DEP Form No: 62-210.900(1) – Form Effective: 06/16/03

<sup>\*\*</sup> Board of Professional Engineers Certificate of Authorization #00001670

## **Exception to Certification Statement**

The Professional Engineer's certification presented on Page 6 of DEP Form No. 62-210.900(1), dated September 26, 2006, does not include certification that the modifications to the cross-flow scrubber are sufficient to meet the increased load and to meet the established emission limits as requested in Item No. 2 of the Florida Department of Environmental Protection's request for additional information dated July 27, 2006. The requested certification is specifically presented in the response to that item.