TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION

APPLICANT

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

New Wales Facility

Facility ID No. 1050059

PROJECT

Project No. 1050059-074-AC
Application for Minor Air Construction Permit
Project Name: Replacement of GMAP equipment scrubber

COUNTY

Polk County, Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

05/22/2012

Prepared by Quaid Noor

GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

I. Project Description:

A. Applicant:
Ghani Baig, Environmental Manager
Mosaic Fertilizer, LLC – New Wales Facility
13830 Circa Crossing Drive
Lithia, FL 33547

B. Professional Engineer:
Rama Iyer, P.E.
Mosaic Fertilizer, LLC
13830 Circa Crossing Drive
Lithia, FL 33547

C. Project Location:
3095 Highway 640
Mulberry, FL 33680

D. Project Summary:
This project is to replace the GMAP equipment scrubber in the Granular Monoammonium Phosphate (GMAP) Plant, EU ID No. 078, as further described in the permit.

E. Application Information:
Application Received on: April 23, 2012
Application Complete: April 23, 2012

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-210.300, F.A.C. – Permits Required	Y	Subject to general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	Facility is a PSD major source but this project does not trigger PSD review
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Granular Monoammonium Phosphate (GMAP) Plant is a source of particulate matter (PM) emissions
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	Granular Monoammonium Phosphate (GMAP) Plant is not a major source of VOC but could be a source of odors
Rule 62-296.401-470, F.A.C. - Stationary Source Emission Standards	Y	Granular Monoammonium Phosphate (GMAP) Plant is subject to Rule 62-296.403(i), F.A.C. – Phosphate Processing.
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	There is no applicable source category
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	There is no applicable source category
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	There is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS – 40 CFR 61)	N	There is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS –40 CFR 63)	Y	Granular Monoammonium Phosphate (GMAP) Plant is subject to 40 CFR 63, Subpart BB.
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	Y	Facility is a Title V source

Subject to:	Y/N	Comments
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	PM and F testing are required for EU No. 078

III. Summary of Emissions

Pollutant	EU No. and brief description	Potential Emissions (lbs/hr., tpy, lbs/ton, etc., as applicable)	Allowable Emissions (lbs/hr., tpy, lbs/ton, opacity, etc.)
F	078, GMAP Plant	0.032 lb/ton of P_2O_5 input, 2.40 lb/hr and 10.5 tpy	0.032 lb/ton of P_2O_5 input, 2.40 lb/hr and 10.5 tpy
PM/PM_{10}	078, GMAP Plant	0.0645 lb PM/ton of product, 9.68 lb/hr and 42.4 tpy	0.0645 lb PM/ton of product, 9.68 lb/hr and 42.4 tpy

PSD Applicability Analysis

Pollutant	Baseline Actual Emissions (TPY)	Projected Actual Emissions (TPY)	Projected Actual Minus Baseline Actual Emissions (TPY)	Significant Emissions Rate (TPY)	PSD Required? Y/N
Fluoride, F	1.1	1.1	0	3	N
PM/PM_{10}	18.9	18.9	0	25/15	N

IV. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204 through 297, F.A.C.

V. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).