Mosaic

April 1, 2013

Ms. Kelly Boatwright
Florida Department of Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

RE: Title V revision application
Mosaic Fertilizer, LLC - New Wales Plant
Facility ID No. 1050059

Dear Ms. Boatwright:

Enclosed are two copies of a permit application to revise the Title V permit for Mosaic Fertilizer, LLC's New Wales Plant in Polk County, Florida.

If you have any questions, please do not hesitate to contact me at (813)500-6478.

Sincerely,

for R. Iyer

Rama Iyer, P.E.
Senior Engineer
Environmental

ec: R. Yasurek, G. Baig, D. Sabatino, D. Turley, P. Thomley, S. David / Mosaic

TITLE V

REVISION

PERMIT APPLICATION

Incorporate various construction projects

Including BART exemption modifications

New Wales Facility

Facility ID No. 1050059

March 2013

Mosaic

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- To establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- An initial federally enforceable state air operation permit (FESOP); or
- An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: **Mosaic Fertilizer LLC**	
2. Site Name: **New Wales Plant**	
3. Facility Identification Number: **1050059**	
4. Facility Location... Street Address or Other Locator: **3095 Highway 640** City: **Mulberry** County: **Polk** Zip Code: **33860**	
5. Relocatable Facility? ☐ Yes ☐ No	6. Existing Title V Permitted Facility? ☐ Yes ☐ No

Application Contact

1. Application Contact Name: **Rama Iyer**
2. Application Contact Mailing Address... Organization/Firm: **Mosaic Fertilizer LLC** Street Address: **13830 Circa Crossing Drive** City: **Lithia** State: **FL** Zip Code: **33547**
3. Application Contact Telephone Numbers... Telephone: **(813) 500-6478** ext. Fax: **(813) 571 - 6908**
4. Application Contact E-mail Address: **rama.iyer@mosaicco.com**

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 04/01/2013	3. PSD Number (if applicable):
2. Project Number(s): 1050059 - 083 - AV	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)

Air Construction Permit

- [ ] Air construction permit.
- [ ] Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- [ ] Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

- [ ] Initial Title V air operation permit.
- [x] Title V air operation permit revision.
- [ ] Title V air operation permit renewal.
- [ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- [ ] Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

- [ ] Air construction permit and Title V permit revision, incorporating the proposed project.
- [ ] Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

- [ ] I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Application to revise Title V operating permit to incorporate changes from the following construction permits:

a) **1050059-061-AC -- BART exemption**
b) **1050059-072-AC – replace filter/receiver for AFI Silica storage bin**
c) **1050059-070-AC – SAP 1 turnaround projects**

Attachment 1 includes detailed information on proposed changes to the Title V operating permit. Table 1 summarizes the proposed changes to permit language; Table 2 summarizes the physical and operating changes that occurred at the facility.

The attached permit application form does not include pages for the following emission units that are included in the permit above because all information on the forms is unchanged from the last Title V application (075-AV):
DAP1 (EU-009), MAP1 (EU-011), AFI (EU-027), Multifos A/B (EU-036) – permanently shut down, AFI Si Bin (EU-026)

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
002	**SAP1**	**AF2A**	**NA**
003	**SAP2**	**AF2A**	**NA**
004	**SAP3**	**AF2A**	**NA**
044	**SAP5**	**AF2A**	**NA**
026	**AFI Si bin**	**AF2B**	**NA**
009	**DAP1**	**AF2A**	**NA**
011	**MAP1**	**AF2A**	**NA**
027	**AFI**	**AF2A**	**NA**

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☒ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : **Ghani Baig, Environmental Manager**

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm: **Mosaic Fertilizer, LLC**
   Street Address: **13830 Circa Crossing Drive**
   City: **Lithia** State: **FL** Zip Code: **33547**

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: **(863) 844-5021** Fax: **(863) 844-5450**

4. Owner/Authorized Representative E-mail Address: **ghani.baig@mosaicco.com**

5. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.

   _____ _____
   Signature Date

Replace DAP1 Cooler
New Wales Facility

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   Ron Yasurek, Plant Manager

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):

   [X] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.

   [ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

   [ ] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

   [ ] The designated representative at an Acid Rain source or CAIR source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: Mosaic Fertilizer, LLC
   Street Address: 13830 Circa Crossing Drive
   City: Lithia State: FL Zip Code: 33547

4. Application Responsible Official Telephone Numbers...
   Telephone: (863) 844 - 5089 ext. Fax: ( ) -

5. Application Responsible Official E-mail Address: **ronald.yasurek@mosaicco.com**

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source 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 applicable requirements identified in this application to which the Title V source 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. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature 3/29/13
Date

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Rama Iyer**
   Registration Number: **56919**
2. Professional Engineer Mailing Address...
   Organization/Firm: **Mosaic Fertilizer, LLC**
   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, 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 ☐, 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 ☐, 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 ☐, 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 [X], 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.

Ramaiyer
Signature

March 28, 2013
Date

(seal)

* Attach any exception to certification statement.

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone East (km) **396.6** North (km) **3078.9**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
3. Governmental Facility Code: **0**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **28**	6. Facility SIC(s): **2874**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Dave Turley**
2. Facility Contact Mailing Address... Organization/Firm: **Mosaic Fertilizer, LLC** Street Address: **13830 Circa Crossing Drive** City: **Lithia** State: **FL** Zip Code: **33547**
3. Facility Contact Telephone Numbers: Telephone: (**863**) **844** - **5201** ext. Fax: (**863**) **844** - **5450**
4. Facility Contact E-mail Address: David.Turley@mosaicco.com

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official E-mail Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☒ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☒ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
PM	**A**	**N**
PM10	**A**	**N**
PM2.5	**A**	**N**
FL	**A**	**N**
SO2	**A**	**N**
NOX	**A**	**N**
HF	**A**	**N**
SAM	**A**	**N**
HAPs	**A**	**N**
CO	**B**	**N**
VOC	**B**	**N**

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps NA

1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Att. 2** ☐ Previously Submitted, Date: _____

2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **Att. 2** ☐ Previously Submitted, Date: _____

3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☒ Previously Submitted, Date: **2/2009**

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID: _____ ☐ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☐ Attached, Document ID: _____
3. Rule Applicability Analysis:
   ☐ Attached, Document ID: ___
4. List of Exempt Emissions Units:
   ☐ Attached, Document ID: ___ ☐ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   ☐ Attached, Document ID: ___ ☐ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   ☐ Attached, Document ID: _____ ☐ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   ☐ Attached, Document ID: _____ ☐ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   ☐ Attached, Document ID: _____ ☐ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   ☐ Attached, Document ID: _____ ☐ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    ☐ Attached, Document ID: _____ ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☒ Not Applicable (revision application)

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
   ☐ Attached, Document ID:_____
   ☒ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
   ☒ Attached, Document ID: **Att. 2**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities Onsite but Not Required to be Individually Listed
   ☐ Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
   ☐ Attached, Document ID:_____ ☐ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID: **Att. 1,Table 1** ☐ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

   Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not an Acid Rain source)

   Phase II NO_X Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

   New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable (not a CAIR source)

Additional Requirements Comment

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for an initial, revised or renewal Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for an air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised or renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes, and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit addressed in this application that is subject to air construction permitting and for each such emissions unit that is a regulated or unregulated unit for purposes of Title V permitting. (An emissions unit may be exempt from air construction permitting but still be classified as an unregulated unit for Title V purposes.) Emissions units classified as insignificant for Title V purposes are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Sulfuric Acid Plant 1 (SAP 1)

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: **A**	5. Commence Construction Date: **NA**	6. Initial Startup Date: **NA**	7. Emissions Unit Major Group SIC Code: **28**

8. Federal Program Applicability: (Check all that apply)

   [ ] Acid Rain Unit

   [ ] CAIR Unit

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Proposed emissions limits for No. 1 SAP to meet the Best Available Retrofit Technology (BART) exemption criteria.

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Sulfuric Acid Plant – Double Contact Process**
2. Control Device or Method Code: **044**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Mist Eliminator – Low Velocity (V<250 ft/min)**
2. Control Device or Method Code: **015**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Low NOx burners**
2. Control Device or Method Code: **205**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:
2. Maximum Production Rate: **3400 tpd 100% H_2SO_4**
3. Maximum Heat Input Rate:
4. Maximum Incineration Rate: pounds/hr tons/day
5. Requested Maximum Operating Schedule: **24** hours/day **7** days/week **52** weeks/year **8760** hours/year
6. Operating Capacity/Schedule Comment: **Rates based on Permit 1050059-075-AV and are not modified by this revision application.**

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **SAP 1**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Single stack**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **200 Feet**	7. Exit Diameter: **8.5 feet**
8. Exit Temperature: **170°F**	9. Actual Volumetric Flow Rate: **171,000 Acfm**	10. Water Vapor: **%**
11. Maximum Dry Standard Flow Rate: Dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Emission point parameters based on permit application for 075-AV**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Chemical Manufacturing; Sulfuric Acid; Contact Process; Absorber at 99.9% Conversion.**		
2. Source Classification Code (SCC): **3-01-023-01**	3. SCC Units: **Tons of 100% H_2SO_4**	
4. Maximum Hourly Rate: **142**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum rates based on 3,400 TPD 100% H_2SO_4**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	**044**		**EL**
SAM	**044**	**015**	**EL**
NOx	**205**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **567** lb/hour **2172** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **4.0 lb/ton H2SO4 (3-hr); 3.5 lb/ton H2SO4 (24hr)** Reference: **Permit 1050059-075-AV, III.A.3.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

SO2, lb/hr = 4 lb/ton x 3400 tons/day x 1 day/24 hours = 567 lb/hr
SO2, tons/yr = 496 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 2172 tpy

Notes:

1. 4 lb/ton is 3-hr average limit
2. 496 lb/hr is 24-hr block average limit

Per 1050059-075-AV, III.A.3.2. These limits will not be modified as a part of this permit revision.

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **NSPS**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **4.0 lb/ton 100% H_2SO_4, 3-hr rolling average**	4. Equivalent Allowable Emissions: **NA** lb/hour **NA** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.5 lb/ton 100% H_2SO_4, 24-hr rolling average**	4. Equivalent Allowable Emissions: **496** lb/hour **2172** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **7.1** lb/hour **31.1** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/ton 100% H_2SO_4** Reference: **Permit 1050059-061-AC** **Limit taken to meet BART exemption requirements**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

SAM, lb/hr = .05 lb/ton x 3400 tons/day x 1 day/24 hours = 7.1 lb/hr
SAM, tons/yr = 7.1 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 31.1 tpy

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.05 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: 7.1 lb/hour **31.1** tons/year
5. Method of Compliance: **Performance test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **17** lb/hour **75** tons/year	4. Synthetically Limited? [X] Yes [ ] No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.12 lb/ton 100% H_2SO_4** Reference: **Permit 1050059-075-AV, III.A.5.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: [ ] 5 years [ ] 10 years

10. Calculation of Emissions:

NOx, lb/hr = .12 lb/ton x 3400 tons/day x 1 day/24 hours = 17 lb/hr
NOx, tons/yr = 17 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 75 tpy

Per 1050059-075-AV, III.A.5.2. These limits will not be modified as a part of this permit revision.

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.12 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: **17** lb/hour **75** tons/year
5. Method of Compliance: **Performance test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9, once each Federal fiscal year**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation __ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **1** of **1**

1. Parameter Code: **SO2 CEM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Required by 40cfr60 subpart H	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Att. 2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2006**

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [X] Attached, Document ID: Att. 2
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:
   ☒ Attached, Document ID: Att. 2
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [x] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [x] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Sulfuric Acid Plant 2 (SAP 2)

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: **A**	5. Commence Construction Date: **NA**	6. Initial Startup Date: **NA**	7. Emissions Unit Major Group SIC Code: **28**

8. Federal Program Applicability: (Check all that apply)

   [ ] Acid Rain Unit

   [ ] CAIR Unit

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Proposed emissions limits for No. 2 SAP to meet the Best Available Retrofit Technology (BART) exemption criteria.

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Sulfuric Acid Plant – Double Contact Process**
2. Control Device or Method Code: **044**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Mist Eliminator – Low Velocity (V<250 ft/min)**
2. Control Device or Method Code: **015**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Low NOx burners**
2. Control Device or Method Code: **205**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **3400 tpd 100% H_2SO_4**	
3. Maximum Heat Input Rate:	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: **24** hours/day **52** weeks/year	**7** days/week **8760** hours/year
6. Operating Capacity/Schedule Comment: **Rates based on Permit 1050059-075-AV and are not modified by this revision application.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **SAP 2**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Single stack**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **200 Feet**	7. Exit Diameter: **8.5 feet**
8. Exit Temperature: **170°F**	9. Actual Volumetric Flow Rate: **170,000 Acfm**	10. Water Vapor: **%**
11. Maximum Dry Standard Flow Rate: Dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Emission point parameters based on 1050059-075-AV permit application**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment **1** of **1**

1. Segment Description (Process/Fuel Type): **Chemical Manufacturing; Sulfuric Acid; Contact Process; Absorber at 99.9% Conversion.**		
2. Source Classification Code (SCC): **3-01-023-01**	3. SCC Units: **Tons of 100% H_2SO_4**	
4. Maximum Hourly Rate: **142**	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum rates based on 3,400 TPD 100% H_2SO_4**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	**044**		**EL**
SAM	**044**	**015**	**EL**
NOx	**205**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **567** lb/hour **2172** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **4.0 lb/ton H2SO4 (3-hr); 3.5 lb/ton H2SO4 (24hr)** Reference: **Permit 1050059-075-AV, III.A.3.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

SO2, lb/hr = 4 lb/ton x 3400 tons/day x 1 day/24 hours = 567 lb/hr
SO2, tons/yr = 496 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 2172 tpy

Notes:

3. 4 lb/ton is 3-hr average limit
4. 496 lb/hr is 24-hr block average limit

Per 1050059-075-AV, III.A.3.2. These limits will not be modified as a part of this permit revision.

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **NSPS**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **4.0 lb/ton 100% H_2SO_4, 3-hr rolling average**	4. Equivalent Allowable Emissions: **NA** lb/hour **NA** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.5 lb/ton 100% H_2SO_4, 24-hr rolling average**	4. Equivalent Allowable Emissions: **496** lb/hour **2172** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **7.1** lb/hour **31.1** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.05 lb/ton 100% H_2SO_4** Reference: **Permit 1050059-061-AC** **Limit taken to meet BART exemption requirements**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **SAM, lb/hr = .05 lb/ton x 3400 tons/day x 1 day/24 hours = 7.1 lb/hr** **SAM, tons/yr = 7.1 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 31.1 tpy**	
11. Potential, Fugitive, and Actual Emissions Comment: **NA**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.05 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: 7.1 lb/hour **31.1** tons/year
5. Method of Compliance: **Performance test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **17** lb/hour **75** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.12 lb/ton 100% H_2SO_4** Reference: **Permit 1050059-075-AV, III.A.5.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

NOx, lb/hr = .12 lb/ton x 3400 tons/day x 1 day/24 hours = 17 lb/hr
NOx, tons/yr = 17 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 75 tpy

Per 1050059-075-AV, III.A.5.2. These limits will not be modified as a part of this permit revision.

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.12 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: **17** lb/hour **75** tons/year
5. Method of Compliance: **Performance test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9, once each Federal fiscal year**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation __ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor __1__ of __1__

1. Parameter Code: **SO2 CEM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Required by 40cfr60 subpart H	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Att. 2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2006**

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [X] Attached, Document ID: Att. 3
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.):
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements:
   ☒ Attached, Document ID: Att. 1
2. Compliance Assurance Monitoring:
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation:
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading):
   ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

   [X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

   [ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

   [X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

   [ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in this Section:
Sulfuric Acid Plant 3 (SAP 3)

3. Emissions Unit Identification Number: **002**

4. Emissions Unit Status Code: **A**	5. Commence Construction Date: **NA**	6. Initial Startup Date: **NA**	7. Emissions Unit Major Group SIC Code: **28**

8. Federal Program Applicability: (Check all that apply)

   [ ] Acid Rain Unit

   [ ] CAIR Unit

9. Package Unit:
   Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:
Proposed emissions limits for No. 3 SAP to meet the Best Available Retrofit Technology (BART) exemption criteria are already incorporated in 1050059-075-AV.

EMISSIONS UNIT INFORMATION
Section [3] of [4] EU-004, SAP3

Emissions Unit Control Equipment/Method: Control **1** of **3**

1. Control Equipment/Method Description: **Sulfuric Acid Plant – Double Contact Process**
2. Control Device or Method Code: **044**

Emissions Unit Control Equipment/Method: Control **2** of **3**

1. Control Equipment/Method Description: **Mist Eliminator – Low Velocity (V<250 ft/min)**
2. Control Device or Method Code: **015**

Emissions Unit Control Equipment/Method: Control **3** of **3**

1. Control Equipment/Method Description: **Low NOx burners**
2. Control Device or Method Code: **205**

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate: **3400 tpd 100% H_2SO_4**	
3. Maximum Heat Input Rate:	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule:	
24 hours/day	**7** days/week
52 weeks/year	**8760** hours/year
6. Operating Capacity/Schedule Comment: **Rates based on Permit 1050059-075-AV and are not modified by this revision application.**	

C. EMISSION POINT (STACK/VENT) INFORMATION

(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **SAP 3**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **Single stack**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **200 Feet**	7. Exit Diameter: **8.5 feet**
8. Exit Temperature: **170°F**	9. Actual Volumetric Flow Rate: **170,000 Acfm**	10. Water Vapor: **%**
11. Maximum Dry Standard Flow Rate: Dscfm	12. Nonstack Emission Point Height: Feet	
13. Emission Point UTM Coordinates... Zone: East (km): North (km):	14. Emission Point Latitude/Longitude… Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **Emission point parameters based on 1050059-075-AV permit application.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type):		
Chemical Manufacturing; Sulfuric Acid; Contact Process; Absorber at 99.9% Conversion.		
2. Source Classification Code (SCC): **3-01-023-01**	3. SCC Units: **Tons of 100% H_2SO_4**	
4. Maximum Hourly Rate: **133.33**	5. Maximum Annual Rate: **1,168,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment: **Maximum rates based on 3,400 TPD 100% H_2SO_4**		

Segment Description and Rate: Segment _ of _

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment:		

EMISSIONS UNIT INFORMATION
Section [3] of [4] EU-004, SAP3

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO2	**044**		**EL**
SAM	**014**		**EL**
NOx	**205**		**NS**

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SO2**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **567** lb/hour **2172** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **4.0 lb/ton H2SO4 (3-hr); 3.5 lb/ton H2SO4 (24hr)** Reference: **Permit 1050059-075-AV, III.A.3.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

SO2, lb/hr = 4 lb/ton x 3400 tons/day x 1 day/24 hours = 567 lb/hr
SO2, tons/yr = 496 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 2172 tpy

Notes:

5. 4 lb/ton is 3-hr average limit
6. 496 lb/hr is 24-hr block average limit

Per 1050059-075-AV, III.A.3.2. These limits will not be modified as a part of this permit revision.

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **2**

1. Basis for Allowable Emissions Code: **NSPS**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **4.0 lb/ton 100% H_2SO_4, 3-hr rolling average**	4. Equivalent Allowable Emissions: **NA** lb/hour **NA** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions **2** of **2**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **3.5 lb/ton 100% H_2SO_4, 24-hr rolling average**	4. Equivalent Allowable Emissions: **496** lb/hour **2172** tons/year
5. Method of Compliance: **CEM**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **SAM**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **7.1** lb/hour **31.1** tons/year	4. Synthetically Limited? ☒ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **.05 lb/ton 100% H_2SO_4** Reference: **Permit 1050059-075-AV, A.3.2**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **SAM, lb/hr = .05 lb/ton x 3400 tons/day x 1 day/24 hours = 7.1 lb/hr** **SO2, tons/yr = 7.1 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 31.1 tpy**	
11. Potential, Fugitive, and Actual Emissions Comment: **NA**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions **1** of **1**

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.05 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: **7.1** lb/hour **31.1** tons/year
5. Method of Compliance: **Performance Test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Complete a Subsection F1 for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V operation permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

1. Pollutant Emitted: **NOx**	2. Total Percent Efficiency of Control: **NA**
3. Potential Emissions: **17** lb/hour **75** tons/year	4. Synthetically Limited? ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.12 lb/ton 100% H2SO$** Reference: **Permit 1050059-075-AV, A.5.3**	7. Emissions Method Code: **0**
8.a. Baseline Actual Emissions (if required): **N/A** tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): **N/A** tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

NOx, lb/hr = .12 lb/ton x 3400 tons/day x 1 day/24 hours = 17 lb/hr
NOx, tons/yr = 17 lb/hr x 8760 hr/yr x 1 ton/2000 lbs = 75 tpy

11. Potential, Fugitive, and Actual Emissions Comment:
NA

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete Subsection F2 if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **PERMIT**	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units: **0.12 lb/ton 100% H_2SO_4**	4. Equivalent Allowable Emissions: **17** lb/hour **75** tons/year
5. Method of Compliance: **Performance test**	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions _ of _

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions: **NA**
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

Allowable Emissions Allowable Emissions

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance:	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete Subsection G if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE10**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **10** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Method 9, once each Federal fiscal year**	
5. Visible Emissions Comment:	

Visible Emissions Limitation: Visible Emissions Limitation __ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete Subsection H if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor __1__ of __1__

1. Parameter Code: **SO2 CEM**	2. Pollutant(s): **SO2**
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment: Required by 40cfr63 subpart H	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	☐ Rule ☐ Other
4. Monitor Information... Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [X] Attached, Document ID: **Att. 2** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2006**

3. Detailed Description of Control Equipment: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**

4. Procedures for Startup and Shutdown: (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [X] Previously Submitted, Date **2009**
   [ ] Not Applicable

6. Compliance Demonstration Reports/Records:
   [X] Attached, Document ID: Att. 3
   Test Date(s)/Pollutant(s) Tested: _____
   Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Not Applicable
   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute:
   [ ] Attached, Document ID: [X] Not Applicable

I. EMISSIONS UNIT ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e)): ☐ Attached, Document ID: _____ ☒ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rules 62-212.400(4)(d) and 62-212.500(4)(f), F.A.C.): ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Description of Stack Sampling Facilities: (Required for proposed new stack sampling facilities only) ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements: ☒ Attached, Document ID: Att. 1
2. Compliance Assurance Monitoring: ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation: ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading): ☐ Attached, Document ID: _____ ☒ Not Applicable

Additional Requirements Comment

Attachment 1

Revision Application Description

Table 1. List of Proposed Permit Modifications

Table 2. Construction Summary

Applicable Requirements

ATTACHMENT 1. Proposed Revisions to New Wales Title V permit:

We request a revision to the New Wales facility Title V permit (1050059-075-AC) to accommodate the following changes. Details are in Table 1 below.

- Incorporate permit 1050059-061-AC (BART exemption permit) – new SAM limits for SAPs 1&2; minor revision to description; incorporate PSD emissions reporting for 5 years following startup.
- Incorporate permit 1050059-070-AC (SAP 1 2011 turnaround) – minor revision to description
- Incorporate permit 1050059-063-AC (AFI Silica storage & unloading) – PSD emission reporting for 5 years following startup
- Correct/clarify 1050059-075-AV:
    - Consolidate repetitive requirements
    - Clarify excess emissions requirements
    - Clarify averaging period
    - Add missing references
    - Incorporate PSD emissions reporting for SAP3 (EU-004) and DAP 1 (EU-009)
    - Correct listing of RICE emission units

Table 2 lists the construction activities that were completed as part of each of the above-mentioned permits.

Table 1. Permit language proposed modifications

075-AV section	Old Language	New Language	Reason
FW10	*None – Insert new section and re-number following sections.*	**FW.10** Annual Actual Emissions: a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit. b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following: 1) The name, address and telephone number of the owner or operator of the major stationary source;	Incorporate annual PSD reporting for permit 1050059-061-AC.

		2) The annual emissions as calculated pursuant to the provisions of 62-210.370, F.A.C.; 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and 4) Any other information that the owner or operator wishes to include in the report. c. The information required to be documented and maintained pursuant to subparagraphs 62- 212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public. The actual emissions that must be reported and the projected emissions to which they must be compared are listed in Table **xxxx** of this permit. [Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]	
A preamble	Sulfuric Acid Plants (SAPs) No. 1, No. 2, No. 4, and No. 5 consist of a double absorption system. Sulfuric Acid Plant (SAP) No. 3 also consists of a double absorption system. However, instead of utilizing a conventional interpass absorption tower, this plant utilizes a heat recovery system absorption tower. Sulfuric acid mist (SAM) emissions are controlled by Brownian diffusion type candles in the mist eliminator section in the final absorbing tower. The sulfur burner at SAP No. 3 was recently replaced by a like-kind sulfur furnace. No. 1, No. 2 and No. 3 plants produce 3400 tons per day each and No. 4 and No. 5 plants produce 2900 tons per day each of sulfuric acid (100% H2SO4 basis). Acid mist emissions are controlled by a demister.	Sulfuric Acid Plants (SAPs) No. 1, No. 2, **No. 3,** No. 4, and No. 5 consist of a double absorption system. Sulfuric Acid Plants (SAP) No. 3 ~~also consists of a double absorption system. However, instead of utilizing a conventional interpass absorption tower, this plant~~ utilizes a heat recovery system absorption tower **instead of a traditional interpass absorption tower.** ~~Sulfuric acid mist (SAM) emissions are controlled by Brownian diffusion type candles in the mist eliminator section in the final absorbing tower. The sulfur burner at SAP No. 3 was recently replaced by a like-kind sulfur furnace.~~ ~~No. 1, No. 2 and No. 3 plants produce 3400 tons per day each and No. 4 and No. 5 plants produce 2900 tons per day each of sulfuric acid (100% H2SO4 basis).~~ **Sulfuric** ~~a~~Acid mist **(SAM)** emissions are controlled by a demister **in the final absorption tower. SAPs No. 1, 2, 3 demisters have Brownian diffusion type candles.**	Shorten description and make it easier to modify as conversion to HRS is completed for SAP 2 and 4 at the next turnarounds.
A.4.2	Sulfur Acid Mist (SAM) emissions shall not exceed the following for SAP Nos. 1&2: 0.10 lb/ton 100% H2 SO4 14 lb/hr 62 tpy	Sulfur**ic** Acid Mist (SAM) emissions shall not exceed the following for SAP Nos. 1&2: ~~0.10~~ **0.05** lb/ton 100% H2 SO4 ~~14~~ **7.1** lb/hr ~~62~~ **30.7** tpy Also add citation for permit 1050059-061-AC	Incorporate permit 1050059-061-AC.

C.9	*None – Insert new section and re-number following sections.*	**C.9.** Daily Records: The permittee shall maintain a daily record of hours of operation and the equivalent P2O5 feed. Documentation as to how daily production rates were calculated shall be included as part of the records. This daily log shall be maintained at the facility and shall be made available to the Department upon request.	Clarify daily records requirements
D.5	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **D.5** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **D.5.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **D.5.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in CC or in FW and renumber subsequent sections. Current operating permit only includes this language in section A (Sulfuric Acid Plants)
D.12	**D.12.** In order to document compliance with the process rate limitation of **Condition D.1,** the permittee shall maintain daily records of the amount of material processed and the total hours of process operations.	**Remove; repeats D.5.e and D.5.f**	Duplicated in D.5.e,f and D.12
E.1.a	The operation rate shall not exceed 150 tons/hour of monoammonium phosphate (MAP) or diammonium phosphate (DAP) product.	The operation rate shall not exceed 150 tons/hour **(daily average)** of monoammonium phosphate (MAP) or diammonium phosphate (DAP) product.	Clarify averaging period.
E.1.b	The fuel heat input rate for the dryer shall not exceed 27.7 MMBtu/hr.	The fuel heat input rate for the dryer shall not exceed 27.7 MMBtu/hr **(daily average)**.	Clarify averaging period.
E.7	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an	Add here or in CC or FW and

		NSPS, NESHAP or Acid Rain program provision. **E.7** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **E.7.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **E.7.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	renumber subsequent sections
E.8	[Rule 62-297.401, F.A.C.]	**[40 CFR 63.626(a)(1),** Rule 62-297.401, F.A.C.]	Add MACT reference for clarity.
E.14	Federal Rule Requirements NSPS Requirement: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants. However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. [Rules 62-204.800 and 62.213-440, F.A.C.; 40 cfr 63.631]	Federal Rule Requirements NSPS Requirement: ~~In addition to the specific conditions listed above, the emissions unit is also subject to~~ **This unit is exempt from** the applicable requirements contained in 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants **because it has demonstrated compliance with 40 CFR 63 subparts A and BB**. ~~However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants.~~ [Rules 62-204.800 and 62.213-440, F.A.C.; 40 cfr 63.631]	Clarify method of compliance with 40 cfr 60 subpart V.
E.14	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production	Add NESHAP reference.

	A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [Rules 62-204.800 and 62-214.440, F.A.C]	Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [**40 CFR 63.620(b)(1),** Rules 62-204.800 and 62-214.440, F.A.C]	
F.1.a	The operation rate for each train, East or West, shall not exceed 170 tons/hr of monoammonium phosphate (MAP) or diammonium phosphate (DAP) product {approximately 80 tons P_2O_5/hour input feed}.	The operation rate for each train, East or West, shall not exceed 170 tons/hr of monoammonium phosphate (MAP) or diammonium phosphate (DAP) product {approximately 80 tons P_2O_5/hour input feed} **as a daily average**.	Clarify averaging period
F.1.b	The fuel input rate for each dryer shall not exceed 36 MMBtu/hr.	The fuel input rate for each dryer shall not exceed 36 MMBtu/hr **as a daily average.**	Clarify averaging period
F.10	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **F.10** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **F.10.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **F.10.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in FW.6 and renumber subsequent sections
F.22	Federal Rule Requirements NSPS Requirement: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements	Federal Rule Requirements NSPS Requirement: ~~In addition to the specific conditions listed above, the emissions unit is also subject to~~ **This unit is exempt from** the applicable requirements contained in 40 CFR 60 Subpart V – Standards of Performance of	Clarify method of compliance with 40 cfr 60

	contained in 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants. However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. [Rules 62-204.800 and 62.213-440, F.A.C.; 40 cfr 63.631]	Phosphate Fertilizer Industry: Diammonium Phosphate plants **because it has demonstrated compliance with 40 CFR 63 subparts A and BB**. ~~However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants.~~ [Rules 62-204.800 and 62.213-440, F.A.C.; 40 cfr 63.631]	subpart V.
F.22	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [Rules 62-204.800 and 62-214.440, F.A.C]	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [**40 CFR 63.620(b)(1),** Rules 62-204.800 and 62-214.440, F.A.C]	Add NESHAP reference
G.1	Permitted Capacity. The MAP production rate shall not exceed 50 tons per hour. [Rule 62-4.160(2), F.A.C.; and, Rule 62-210.200, F.A.C., Definitions – (PTE)]	Permitted Capacity. The MAP production rate shall not exceed 50 tons per hour **as a daily average**. [Rule 62-4.160(2), F.A.C.; and, Rule 62-210.200, F.A.C., Definitions – (PTE)]	Clarify averaging period
G.14	Federal Rule Requirements NSPS Requirement: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants. However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. [Rules 62-204.800 and 62.213-440, F.A.C.; 40	Federal Rule Requirements NSPS Requirement: ~~In addition to the specific conditions listed above, the emissions unit is also subject to~~ **This unit is exempt from** the applicable requirements contained in 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants **because it has demonstrated compliance with 40 CFR 63 subparts A and BB**. ~~However, this emissions unit is exempt from the requirements of 40 cfr 60 Subpart V if it is in compliance with 40 CFR 63 Subpart BB- National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants.~~ [Rules 62-204.800 and 62.213-440, F.A.C.; 40 cfr 63.631]	Clarify method of compliance with 40 cfr 60 subpart V.

	cfr 63.631]		
G.14	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [Rules 62-204.800 and 62-214.440, F.A.C]	NESHAP Requirements: In addition to the specific conditions listed above, the emissions unit is also subject to the applicable requirements contained in 40 CFR 63, Subpart A – General Provisions and 40 CFR 63 Subpart BB – National Emissions Standards for Hazardous Air Pollutants from Phosphate Fertilizer Production Plants. The NESHAP common conditions are placed in Subsections MACT A and MACT BB. [**40 CFR 63.620(b)(1),** Rules 62-204.800 and 62-214.440, F.A.C]	Add NESHAP reference
H.5	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **H.5** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **H.5.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **H.5.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in FW.6 and renumber subsequent sections
I.1.a	The process/operation rate shall not exceed 120 tons per hour of animal feed ingredients.	The process/operation rate shall not exceed 120 tons per hour **as a daily average** of animal feed ingredients.	Clarify averaging period.
I.1.b	The maximum fuel heat input rate for the dryer is 135 MMBtu/hr.	The maximum fuel heat input rate for the dryer is 135 MMBtu/hr **as a daily average.**	Clarify averaging period.
I.2	*None. Add language and renumber*	**I.2 Emissions Unit Operating Rate Limitation After Testing. See the related**	Clarify

	subsequent sections	**testing provisions in Appendix TR, Facility-wide Testing Requirements.**	operating limits after stack testing.
I.5	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **I.5** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **I.5.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **I.5.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in FW.6 and renumber subsequent sections
J.3	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **J.3** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **J.3.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **J.3.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance	Add here or in FW.6 and renumber subsequent sections

		with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	
K.5	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **K.5** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **K.5.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **K.5.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in FW.6 and renumber subsequent sections
M.3	Allowable Fuel: The permittee is authorized to burn only the following fuels in the dryer: (a) Fuel heat input 30.0 MMBtu/hr Natural Gas (b) Fuel heat input 30.0 MMBtu/hr New No. 6 fuel oil or better grade with a fuel oil sulfur content of up to 2.50% S, by weight (see CC.5 for the definition of a better grade fuel oil).	Allowable Fuel: The permittee is authorized to burn only the following fuels in the dryer: (a) Fuel heat input 30.0 MMBtu/hr Natural Gas **as a daily average** (b) Fuel heat input 30.0 MMBtu/hr New No. 6 fuel oil or better grade with a fuel oil sulfur content of up to 2.50% S, by weight **as a daily average** (see CC.5 for the definition of a better grade fuel oil).	Clarify averaging time
MACT AA.1(2)	Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in 63.626(c)(4) or (d)(4).	Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in 63.**606**(c)(4) or (d)(4).	Incorrect citation (citation for subpart BB instead of AA)
Table 2	Min. Compliance Test Duration column says "1 hour" for all tests except some VE	Should be "3 runs of >=1 hour" instead of "1 hour"	Clarify

	measurements		
CC or FW	*None – Insert new section and re-number following sections.*	**Excess Emissions** Rule 62-210.700 (Excess Emissions), F.A.C cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision. **CC.x or FW.x** Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [rule 62-210.700(4), F.A.C.; construction Permit 105059-061-AC) **CC.x.1 or FW.x.1** Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [rule 62-210.700(1), F.A.C. **CC.x.2 or FW.x.2** Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the department. [Rule 62-210.700(6), F.A.C	Add here or in each permit section (preferred, specified above) and renumber subsequent sections. Note that the current TV permit only has this language in the sulfuric acid plant section.
III	*Modify the list of RICE engines in EU-087 and EU-088 as specified in Tables 1a and 1b below.*		

Table 1a. EU-087 Emergency Stationary CI RICE<500 HP:

Manufacturer & Model Number	HP Rating	Date of Manuf./Const.	Emergency Engine Location/Purpose
Cummins, Model NTA855P450	425	Prior to June 12, 2006	No. 2 Deepwell
Cummins, Model ~~NTA855F2~~ **NTC-350**	350	Prior to June 12, 2006	C1 Diesel Fire Pump
Ford, Model 4500EM **//T-4668**	105	Prior to June 12, 2006	DAP#2 East**, Acid Booster**
~~Cummins, Model IND355BC **(NOT IN USE)**~~	~~335~~	~~Prior to June 12, 2006~~	~~Decant Pump~~
~~Detroit, Model 12V71 **(NOT IN USE)**~~	~~350~~	~~Prior to June 12, 2006~~	~~C1 #5 Generator~~

Table 1b. EU-088 Existing Non-Emergency CI RICE 100<=HP<=500 HP

Manufacturer & Model Number	HP Rating	Date of Manuf./Const.	Engine Location/Purpose
Cummins, Model No. 6BT	~~140~~ **204**	Prior to June 12, 2006	C-1 Liqua Water Blaster
John Deere 4054 TF1501	99	1/1/2003	Booster Pump
Cummins, Water Blaster	204		Water Blaster
~~Onan 125 DYD **(NOT IN USE)**~~			
~~Caterpillar, Model No. 3408 **(NOT IN USE)**~~	~~325~~	~~Prior to June 12, 2006~~	~~S/S Compressor~~
~~Detroit, Model No. 453 **(NOT IN USE)**~~	~~110~~	~~Prior to June 12, 2006~~	~~Booster Pump~~

The engines marked "Not in Use" are out of service and would require significant work to bring them back to serviceable condition; please remove them from the permit listing.

Table **XXX**. Annual actual emissions reporting per condition FW10:

EU	Years	Pollutant	Projected Emissions for comparison, tpy	Basis (Permit #)
004 (SAP 3)	2011 – 2015	SO2	1597	1050059-063-AC
	2011 – 2015	SAM	22.0	1050059-063-AC
	2011 – 2015	NOx	27.2	1050059-063-AC
026 (AFI Si Bin)	2016	PM/PM10	1.2	1050059-072-AC
	2012 - 2016	VE	0 %	1050059-072-AC

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

BART Permit Work Activities (1050059-061-AC)

Status of BART permit work activities

EU	Work Activities	Status (Completion Date)
-002 (SAP 1)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H_2SO_4	Complete. **Include this limit in Title V permit.**
	Increase the catalyst loading ratio from approximately 147 liters per ton H2SO4 per day (L/TPD) at 3400 TPD production rate to approximately 190 L/TPD at 3200 TPD production rate {increases the current catalyst loading from approximately 498,400 liters to 610,000 liters}	Completed January 2012
	Install a heat recovery system (HRS) to replace the interpass absorption (IPA) tower (if necessary, install/replace)	Canceled. HRS installed in SAP 2 and SAP 4 instead.
	Install Brownian diffusion type candles in the final absorption tower for SAM control	Completed January 2012. Also replaced top portion of the final absorption tower to accommodate the larger demisters.
	Misc	Replaced Waste Heat Boiler #2, Economizer 3B, Superheater 0A
-003 (SAP 2)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H_2SO_4	Complete. **Include this limit in Title V permit.**
	Increase the catalyst loading ratio from approximately 147 liters per ton H2SO4 per day (L/TPD) at 3400 TPD production rate to approximately 190 L/TPD at 3200 TPD production rate {increases the current catalyst loading from approximately 498,400 liters to 610,000 liters}	Completed June 2011
	Install a heat recovery system (HRS) to replace the interpass absorption (IPA) tower (if necessary, install/replace)	**Scheduled for Jan 2014 turnaround.** A separate permit application has been submitted.
	Replace the sulfur furnace (if necessary, install/replace)	**Scheduled for Jan 2014 turnaround.** A separate permit application has been submitted.
	Replace the drying tower (if necessary, install/replace)	**Scheduled for Jan 2014 turnaround.** A separate permit application has been submitted. The doghouse portion of the tower will be replaced to accommodate the candle design. Not required to meet BART limits.
	Install Brownian diffusion type candles in the final absorption tower for SAM control	Completed June 2011

	Misc -- Replaced Economizer 3B, Superheater 0A, silencer	Completed June 2011
-004 (SAP 3)	Meet SAM limit of 7.1 lb/hr; 0.05 lb/ton 100% H_2SO_4	Complete. **Limit already incorporated in Title V permit.**
	Increase the catalyst loading ratio from approximately 157 liters per ton H2SO4 per day (L/TPD) at 3400 TPD production rate to approximately 190 L/TPD at 3200 TPD production rate {increases the current catalyst loading from approximately 535,200 liters to 610,000 liters}	Completed January 2010
	Install a heat recovery system (HRS) to replace the interpass absorption (IPA) tower (if necessary, install/replace)	Completed January 2010
	Replace the sulfur furnace (if necessary, install/replace)	Completed January 2010
	Replace the drying tower (if necessary, install/replace)	**Postponed**. A new permit application will be submitted prior to construction.
	Install Brownian diffusion type candles in the final absorption tower for SAM control	Completed January 2010
	Misc – Replaced #1 & #2 Waste Heat Boilers, #3B economizer and #0A superheater, stack repairs	Completed August 2012
-036	Install caustic scrubber for each of the Multifos A and B kilns	**Canceled**. Multifos A and B kilns shut down 9/21/2011.

No. 1 SAP June 2011 Turnaround – 1050059-070-AC and May 20, 2011 letter

-003 (SAP 2)	Install candle mist eliminators, economizer, superheater	Completed June 2011
-002 (SAP 1)	Install candle mist eliminators, economizer, superheater	Completed January 2012
-044 (SAP 5)	HRS tower replacement, internal distribution header, external piping, economizer, superheater, acid diluter vessel	**Canceled.** SAP 4 will be converted to HRS in June 2013 (permits 067-AC, 079-AC, 080-AC) instead of SAP 5 because of the timing of capital availability and scheduled turnarounds.

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

-026 (Si storage)	Replace the filter/receiver for the AFI Silica Storage Bin	Completed March 2012

Applicable Requirements

Applicable requirements are as indicated in permit 1050059-075-AV with the following exceptions:

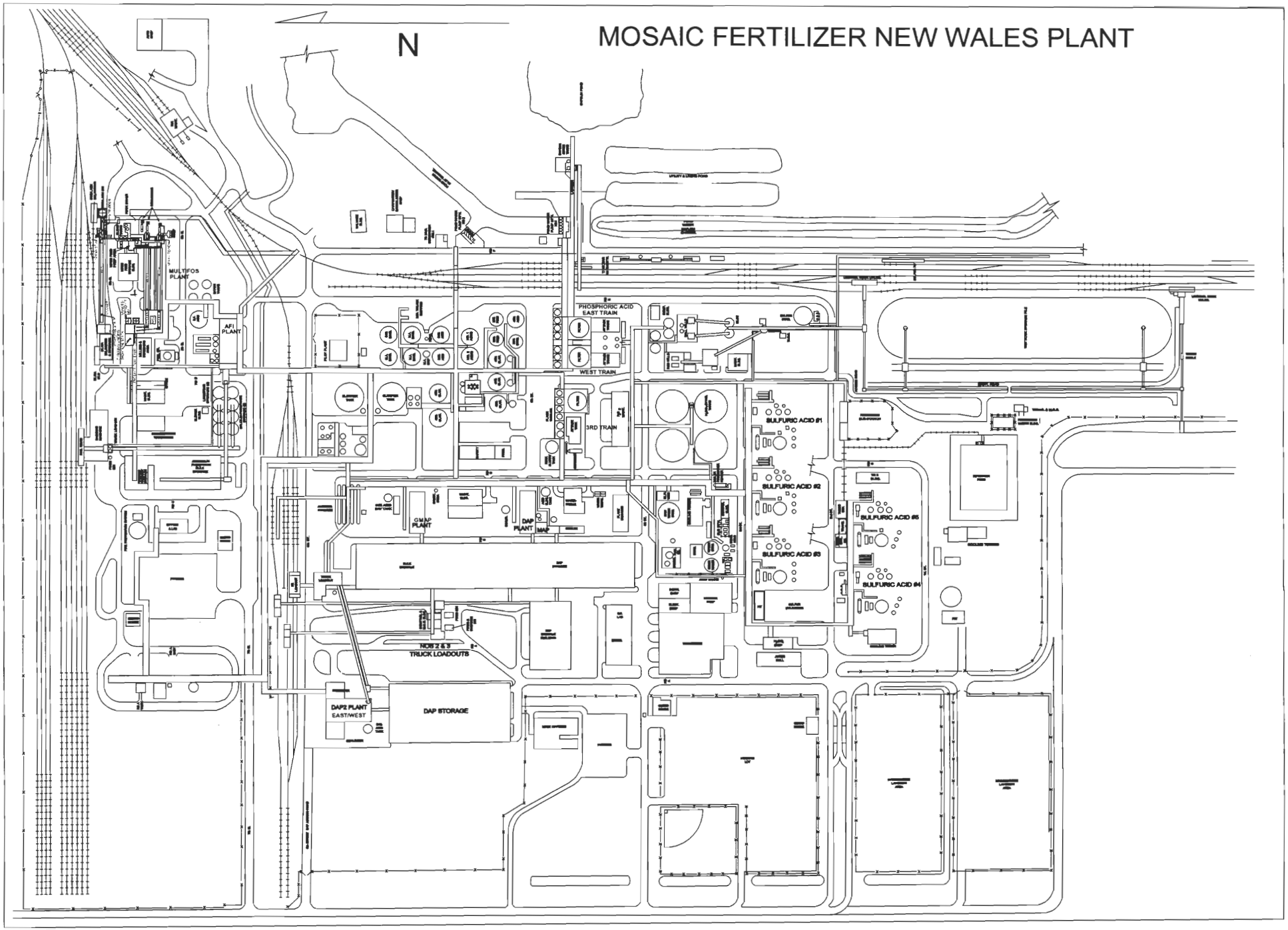
a) *New limit of 0.05 lb SAM/ton 100% H2SO4 produced for Sulfuric Acid Plants 1 and 2 (EU-002 and EU-003) to meet BART exemption requirements*
b) *Clarification of citations as listed in Table 1*
c) *List of RICE as corrected in Tables 1a and 1b*

Attachment 2

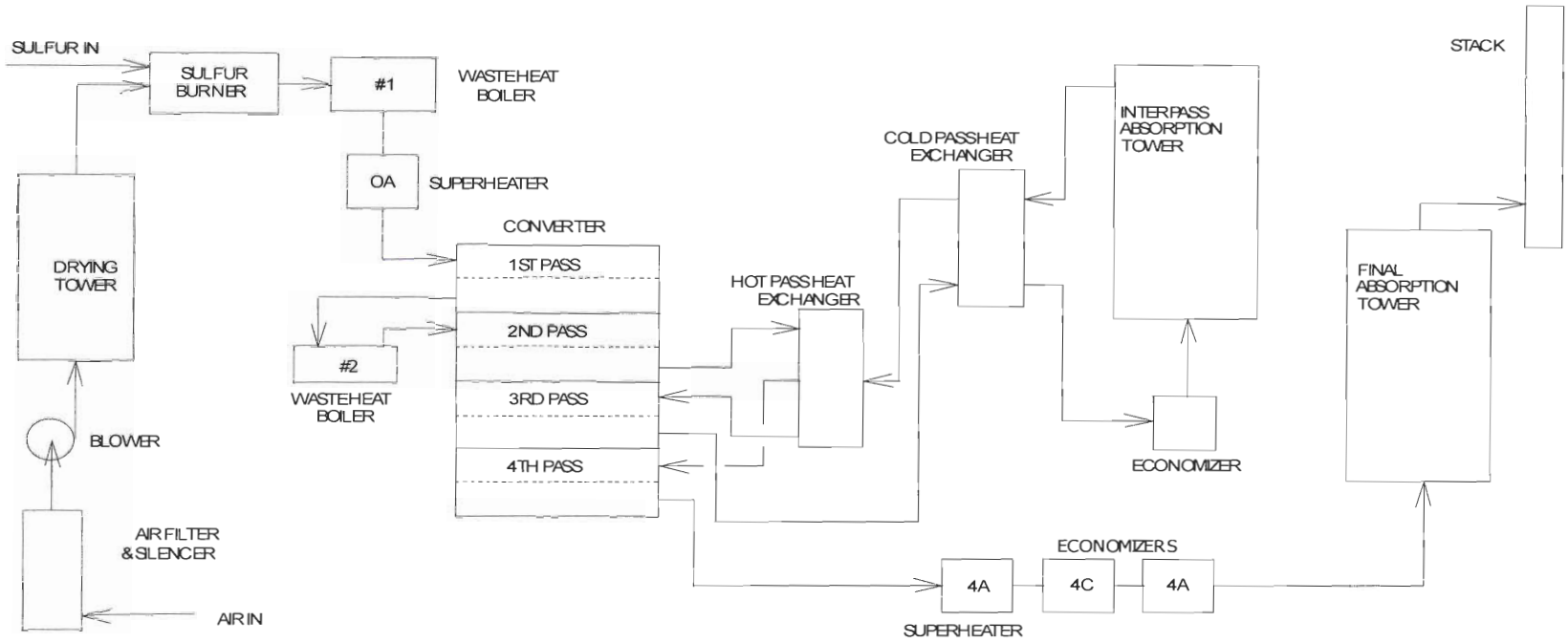
Facility Plot Plan

Process Flow Diagrams

Precautions to Prevent Emissions of Unconfined Particulate Matter


N
MOSAIC FERTILIZER NEW WALES PLANT
MULTIFOS PLANT
AFI PLANT
PHOSPHORIC ACID EAST TRAIN
WEST TRAIN
3RD TRAIN
SULFURIC ACID #1
SULFURIC ACID #2
SULFURIC ACID #3
SULFURIC ACID #4
SULFURIC ACID #5
GYPSUM PLANT
DAP PLANT
MAP
NOS 2 & 3 TRUCK LOADOUTS
DAP2 PLANT EAST/WEST
DAP STORAGE

Flow Diagram



Control Equipment Discription

The Sulfuric Acid Plant consists of a double absorption system. Acid Mist emissions are controlled by a demister.

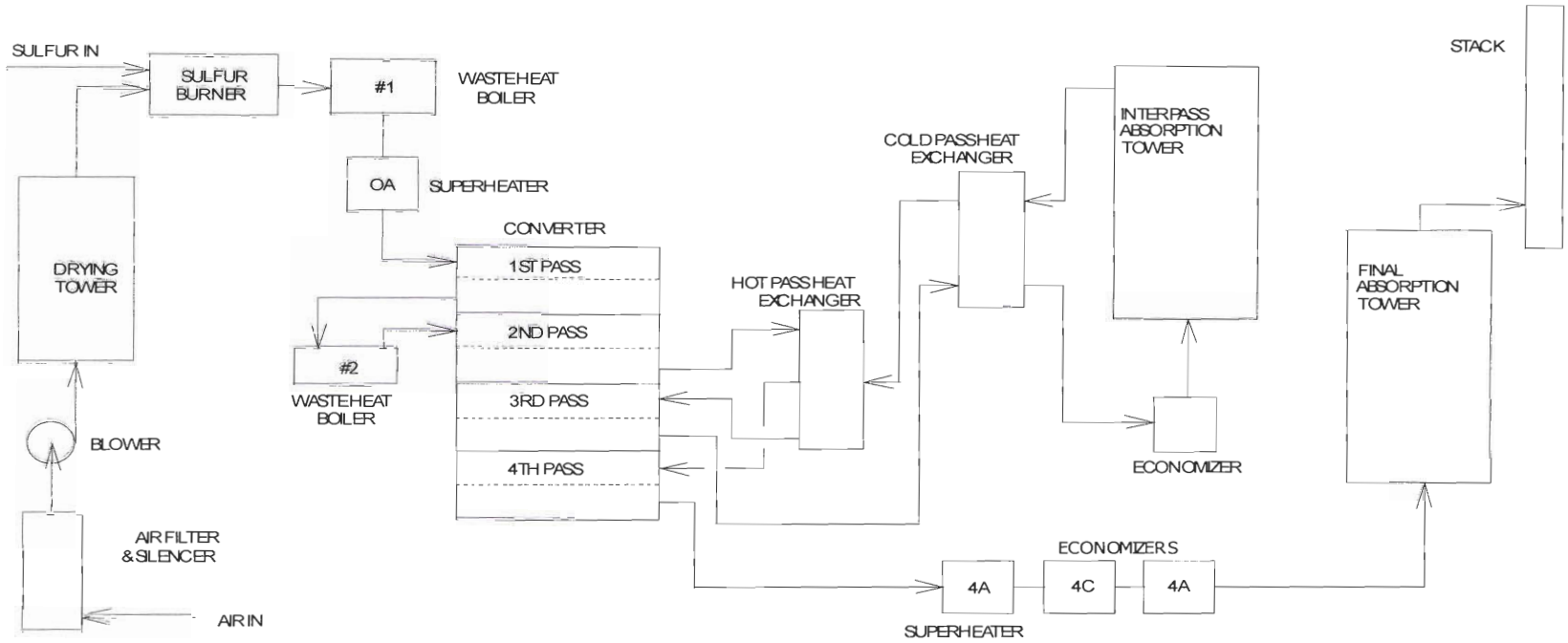
Emission Unit: **Sulfuric Acid Plant No. 1**

ID No.: **002**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

Flow Diagram



Control Equipment Discription

The Sulfuric Acid Plant consists of a double absorption system. Acid Mist emissions are controlled by a demister.

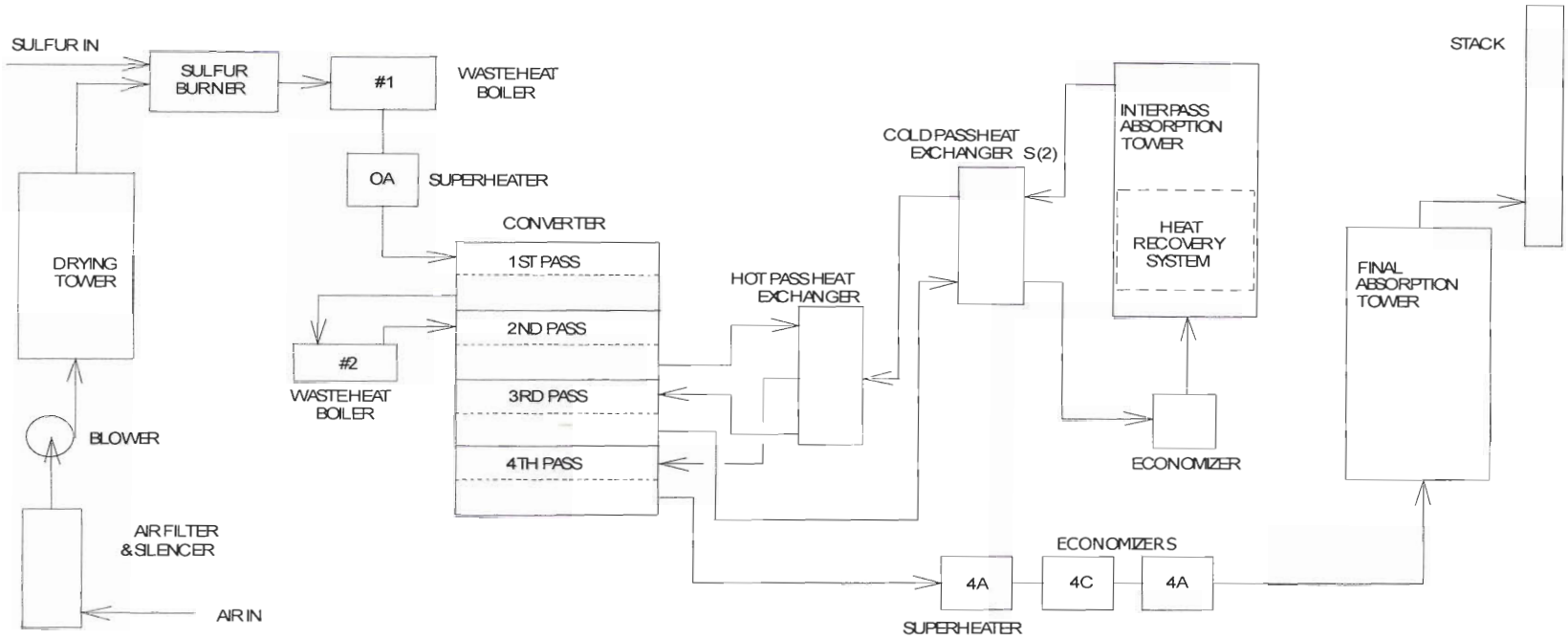
Emission Unit: **Sulfuric Acid Plant No. 2**

ID No.: **003**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

Flow Diagram



Control Equipment Discription

The Sulfuric Acid Plant consists of a double absorption system. Acid Mist emissions are controlled by a demister. This plant is equiped with a heat recovery system in its interpass absorber.

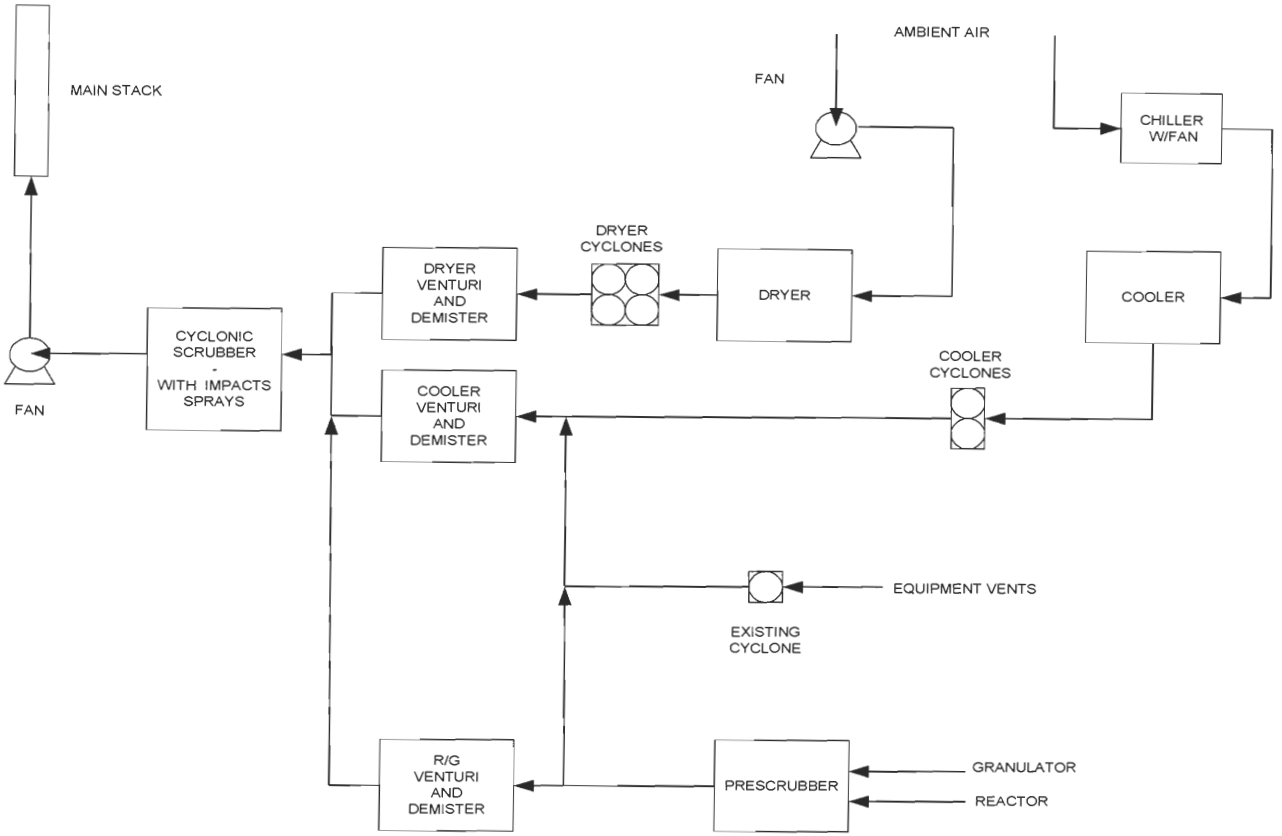
Emission Unit: **Sulfuric Acid Plant No. 3**

ID No.: **004**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

Flow Diagram



Control Equipment Discription

The plant emissions are controlled a pre-scrubber, three venturi scrubbers in parallel which vent through impact sprays to a cyclonic scrubber. The impact system uses recirculating water.

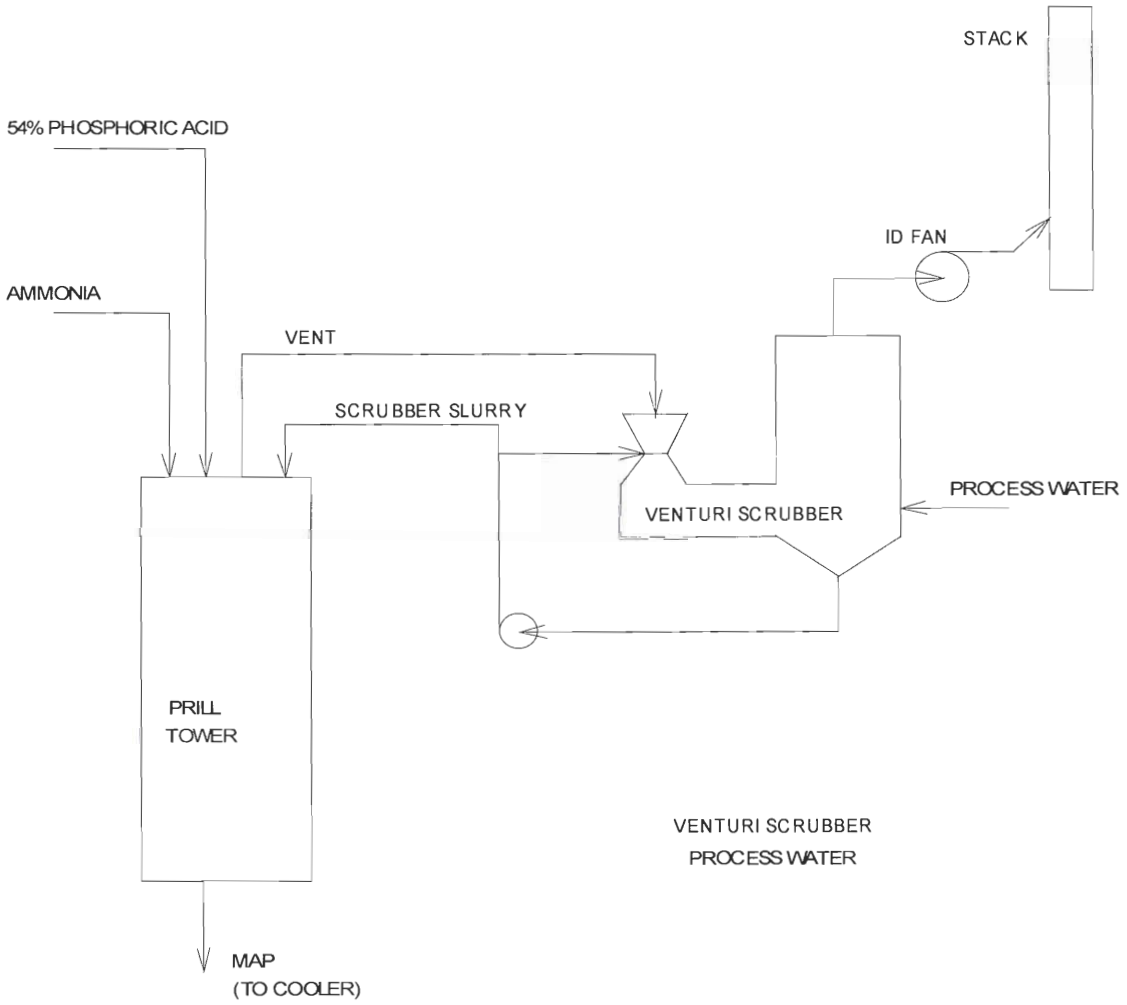
Emission Unit: **DAP Plant No. 1**

ID No.: **009**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

Flow Diagram



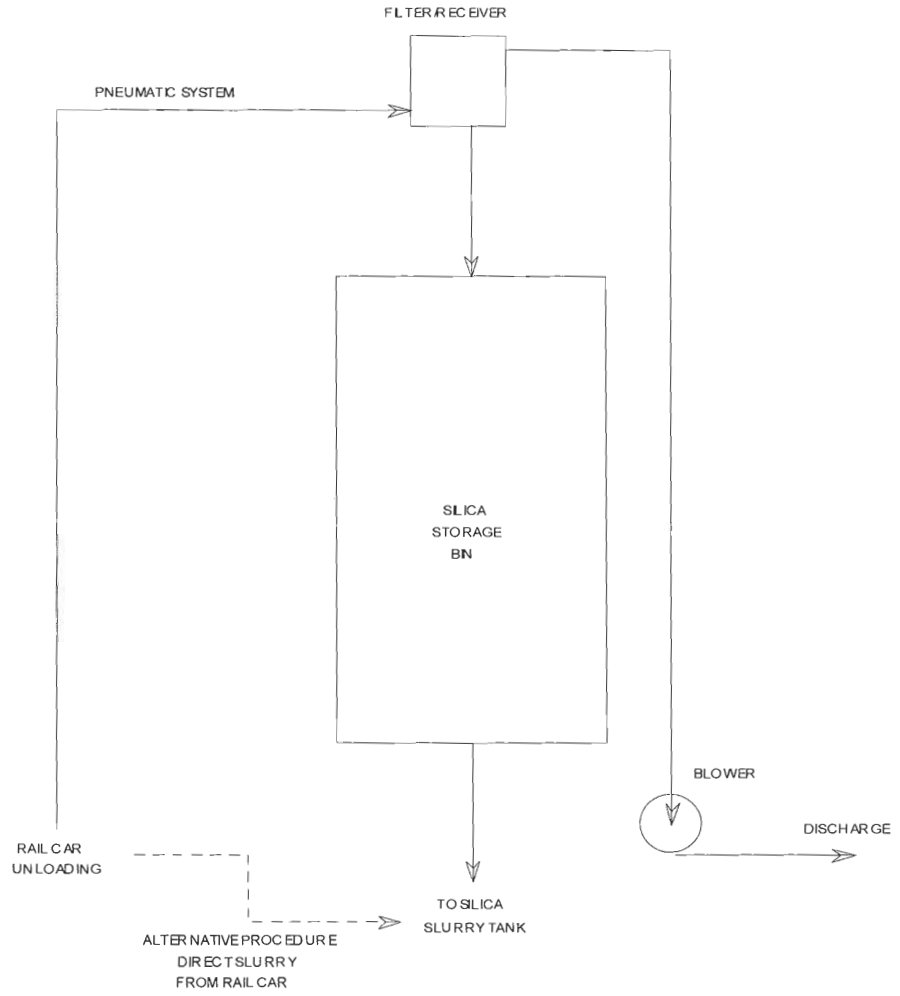
Control Equipment Discription

The emissions are controlled by a venturi scrubber with a recirculating water system. It is vented by a fan located upsteam from the cyclonic demister. The fan discharges to a stack.

Emission Unit: **MAP Plant** ID No.: **011**

Facility: **Mosaic Fertilizer LLC New Wales Plant** ID No.: **1050059**

Flow Diagram



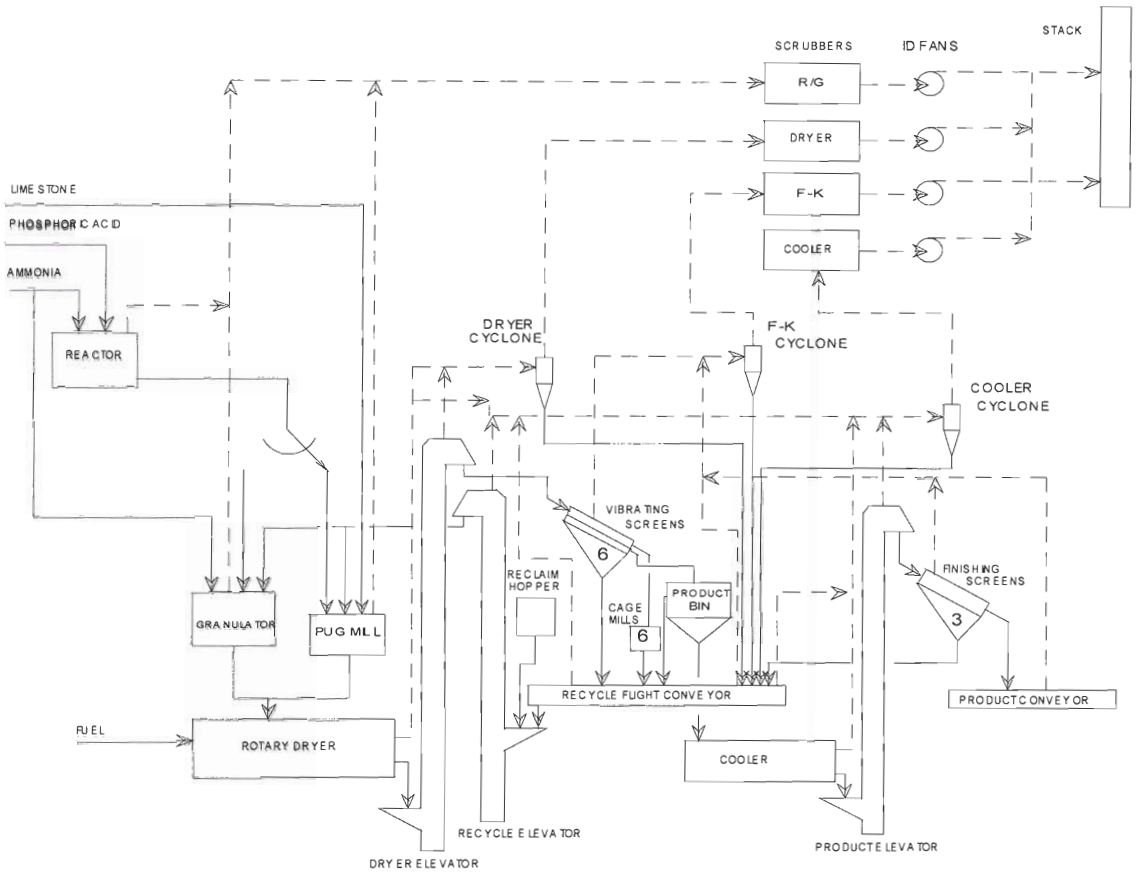
Control Equipment Discription

The emissions are controlled by the use of a vacuum type pnematic system to remove the material from the rail car to the storage bin. A bag type collector/receiver is used at the top of the storage bin. The pnematic blower is located at ground level.

Emission Unit: **AFI Silica Unloading and Storage** ID No.: **026**

Facility: **Mosaic Fertilizer LLC New Wales Plant** ID No.: **1050059**

Flow Diagram



Control Equipment Discription

The emissions are controlled by 4 venturi scrubber systems each with individual fans. All fans vent to a common stack.

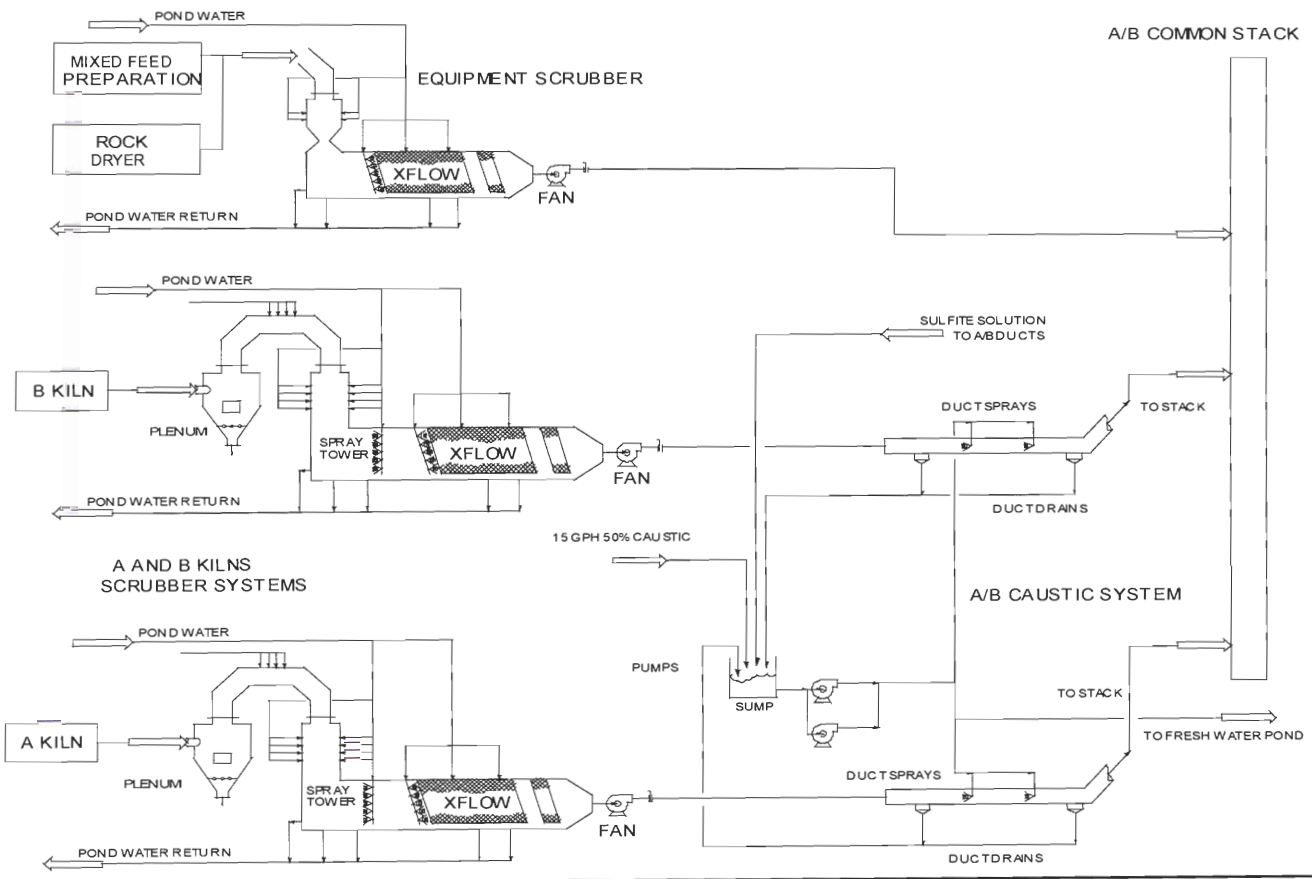
Emission Unit: **AFI Plant**

ID No.: **027**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

Flow Diagram



Control Equipment Discription

PERMANENTLY SHUT DOWN

The emissions from the dryer, the blending operation and Kilns A and B are controlled by three separate packed bed scrubbers vented to a common stack.

Emission Unit: **Multifos A and B Kilns, Dryer and Blending Operation**

ID No.: **036**

Facility: **Mosaic Fertilizer LLC New Wales Plant**

ID No.: **1050059**

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Reasonable precautions to minimize emissions of unconfined particulate matter may include, as necessary:

- Sweeping; when necessary and where practical.
- Landscaping or planting of vegetation.
- Use of enclosures and windbreaks, where practical.
- Oiling of fertilizer products to reduce dust generation.

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Mosaic Fertilizer, LLC **Permit No.:** 1050059-069-AV
New Wales Facility

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities:

GENERAL FACILITY-WIDE

abrasive cleaning - indoors
agricultural related activities
air compressors
air conditioners
air vents in compressed air systems
ammonia bullets, pipeline, pop off valves, flanges, truck/rail unloading, flares and chillers
asbestos, waste and haz-waste removal
automatic oil/lube systems for mechanical equipment and fueling operations
automotive, tractor, locomotives and their repair shops
blueprint copiers
building ventilation systems
caustic tanks/vents
closed containers of maintenance chemicals
cold cleaning degreasers (containing heavier than air solvents)
construction/repair of office, storage and residential units
containers, reservoirs, wax and grease
containers and tanks for oils
cooling towers (no heavy metals used as antiscalants or algaecides)
degassifiers/dearators
diesel pump motors
drain vents
drinking water treatment area and wastewater treatment plant
ducts, chutes, equipment maintenance
dumpsters, other miscellaneous waste collection and handling
electric substation/electric yard
electric-powered vehicles
electrical charging systems
electrically heated equipment for heat treating, drying, annealing, etc.
equipment cleaning, including steam cleaning

equipment for bonding brake shoes
equipment of hydraulic or hydrostatic testing
fire training exercises
food preparation, handling, consumption
fresh water tanks/vents
fuel tanks and dispensors
hand held equipment
handling of baghouse materials
hydroblasting
instrument air systems/vents
laboratories (quality control, analytical, metallurgical)
landscaping and farm equipment
lime silo with baghouse
lime tanks/vents
liming station
liquid sampling systems
maintenance of facilities
maintenance of grounds
maintenance shops
mechanical drives/gearboxes
metal shops
minor fugitive leaks from process equipment
mobile equipment fueling operations (diesel/gasoline)
mobile sources, including internal combustion engines, pumps, compressors, generators, welding , etc.
neutralization tanks/vents
non process mineral spirits use
open containers in use
painting /coating of equipment, tanks and structures (less than 6 gallons per day)
portable kerosene space heaters
pressure/steam relief valves
process water treatment and management systems
pump seals
purchased non-listed chemical tanks/vents (no HAP or VOC content)
railroad flares
railcar/truck/tanker unloading
raw material, reclaim/recycle material and product transfer and storage tanks
reclaimed mined areas
reclaimed water tank vents
refrigeration systems
safety devices
safety kleen solvent cleaners
sandblasters, welding equipment, compressors, wood shop, metal shop
service of air pollution control devices
space heaters
steam vents/leaks
storage facilities for packaged materials
storage tanks and dispensers
sulfuric acid tanks/vents

sweeping and general cleanup
temporary use of compressors, generators, water pumps with internal combustion engines
transfer of materials on covered belt systems
transformer vault/building
vacuum cleaning systems
valves and flanges (no HAP or VOC content)
washing and cleaning equipment
waste preparation for disposal (in closed drums or other containers, spill cleanup)
wastewater plants, water treatment area
water pumps
water treatment aeration
water treatment chemical tanks/totes/drums
wet limestone transfer, handling, storage
woodworking shops

GRANULATION
choke feeder, covered conveyors, screening tower
chutes, conveyor and hopper
coating oil tanks
cooling tower, slurry pump, scrubber sump
covered conveyor, surge bin, product screens, chute to truck/railcar
material conveyors, elevators and screens
oil coating application systems
pond water sumps
product recovery units
raw material, reclaim material and product storage tanks, bins and buildings
scrubber seal tanks
seal oil tanks

MOLTEN SULFUR HANDLING
molten sulfur storage tank fires
sulfur spill cleanup

PHOSPHATE ROCK HANDLING
railcar unloading and unloading pit
rock and feed hoppers, conveyors
train/truck unloading, hoppers, conveyors, wet rock stacking on pile
wet rock grinding
wet rock pile, stacking and transfer

SULFURIC ACID PRODUCTION
auxiliary power diesel generators
auxiliary power generator diesel tank
cooling towers
economizers
hot water reuse tank
process and product storage tanks
sulfuric acid tanker truck/rail loading/unloading
water reuse, uncontaminated water storage, condensate tanks for evaporators

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Mosaic Fertilizer, LLC
New Wales Facility

Permit No.: 1050059-069-AV

SHIPPING UNITS

#1 Fertilizer Rail/Truck Shipping with the application of a dust suppressant at all times.
Fertilizer Truck Loadout No. 2 with the application of a dust suppressant at all times.
Fertilizer Truck Loadout No. 3 with the application of a dust suppressant at all times.
Fertilizer Rail Loadout No. 2 with the application of a dust suppressant at all times.
Fertilizer Rail Loadout No. 3 with the application of a dust suppressant at all times.

Attachment 3

Compliance Demonstration

2012 Statement of Compliance

Mosaic Fertilizer, LLC
13830 Circa Crossing Dr.
Lithia, FL 33547

Certified Mail 7003 1010 0004 7145 9918
Return Receipt Requested

February 26, 2013

Florida Department of Environmental Protection
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road – MS5500
Tallahassee, Florida 32399-2400

RE: Statement of Compliance for 2012

Dear Sir:

Copies of the enclosed Statements of Compliance are being submitted to the FDEP Southwest District and EPA Region IV for the following facilities:

- Mosaic New Wales Plant, 1050059
- Mosaic South Pierce Plant, 1050055

If you have any questions, please contact me at 863-844-5021.

Sincerely,

Ghani Baig
Environmental Manager

CDT:jp
enc.

C: FDEP- Southwest District – Tampa – 7003 1010 0004 7145 9925
EPA Region IV – 7003 1010 0004 7145 9932

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☑ **Annual Requirement**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
January 1 through December of 2012 (year)	N/A

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.
**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Mosaic Fertilizer, LLC

Site Name: South Pierce Plant Facility ID No. 1050055 County: Polk

COMPLIANCE STATEMENT (Check only one of the following three options)

X **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

____ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

____ **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

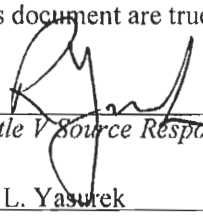
For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.



_____ February 25, 2013
(Signature of Title V Source Responsible Official) *(Date)*

Name: Ronald L. Yasurek Title: Plant Manager, New Wales

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

_____ _____
(Signature of Acid Rain Source Designated Representative) *(Date)*

Name:_____ Title:_____

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Department of Environmental Protection

Division of Air Resource Management

STATEMENT OF COMPLIANCE - TITLE V SOURCE

REASON FOR SUBMISSION (Check one to indicate why this statement of compliance is being submitted)

☑ **Annual Requirement**	☐ **Transfer of Permit**	☐ **Permanent Facility Shutdown**

REPORTING PERIOD*	REPORT DEADLINE**
January 1 through December 31 of 2012 (year)	N/A

*The statement of compliance must cover all conditions that were in effect during the indicated reporting period, including any conditions that were added, deleted, or changed through permit revision.

**See Rule 62-213.440(3)(a)2., F.A.C.

Facility Owner/Company Name: Mosaic Fertilizer, LLC

Site Name: New Wales Plant Facility ID No. 1050059 County: Polk

COMPLIANCE STATEMENT (Check only one of the following three options)

____ **A.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, and there were no reportable incidents of deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above.

____ **B.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part; however, there were one or more reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each incident of deviation, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

__X__ **C.** This facility was in compliance with all terms and conditions of the Title V Air Operation Permit and, if applicable, the Acid Rain Part, EXCEPT those identified in the pages attached to this report and any reportable incidents of deviations from applicable requirements associated with malfunctions or breakdowns of process, fuel burning or emission control equipment, or monitoring systems during the reporting period identified above, which were reported to the Department. For each item of noncompliance, the following information is included:

1. Emissions unit identification number.
2. Specific permit condition number (note whether the permit condition has been added, deleted, or changed during certification period).
3. Description of the requirement of the permit condition.
4. Basis for the determination of noncompliance (for monitored parameters, indicate whether monitoring was continuous, i.e., recorded at least every 15 minutes, or intermittent).
5. Beginning and ending dates of periods of noncompliance.
6. Identification of the probable cause of noncompliance and description of corrective action or preventative measures implemented.
7. Dates of any reports previously submitted identifying this incident of noncompliance.

For each incident of deviation, as described in paragraph **B.** above, the following information is included:

1. Date of report previously submitted identifying the incident of deviation.
2. Description of the incident.

STATEMENT OF COMPLIANCE - TITLE V SOURCE

RESPONSIBLE OFFICIAL CERTIFICATION

I, the undersigned, am a responsible official (Title V air permit application or responsible official notification form on file with the Department) of the Title V source for which this document is being submitted. With respect to all matters other than Acid Rain program requirements, I hereby certify, based on the information and belief formed after reasonable inquiry, that the statements made and data contained in this document are true, accurate, and complete.

(Signature of Title V Source Responsible Official) February 25, 2013 *(Date)*

Name: Ronald L. Yasurek Title: Plant Manager, New Wales

DESIGNATED REPRESENTATIVE CERTIFICATION (only applicable to Acid Rain source)

I, the undersigned, am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

(Signature of Acid Rain Source Designated Representative) *(Date)*

Name: Title:

{Note: Attachments, if required, are created by a responsible official or designated representative, as appropriate, and should consist of the information specified and any supporting records. Additional information may also be attached by a responsible official or designated representative when elaboration is required for clarity. This report is to be submitted to both the compliance authority (DEP district or local air program) and the U.S. Environmental Protection Agency(EPA) (U.S. EPA Region 4, Air and EPCRA Enforcement Branch, 61 Forsyth Street, Atlanta GA 30303).}

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   002 Sulfuric Acid Plant No. 1

2. Specific Permit Condition: **III.A.6.1 (Att. A, MOU 3) (1050059-069-AV)**

3. Description of the requirement in the specific condition:

MOU establishes minimum temperatures for catalyst masses for startups

4. Basis for determination of noncompliance:

Catalyst masses temperatures < MOU minimum

5. Beginning and ending dates of periods of noncompliance:

Period: 9/2

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

The temperature of the catayst masses did not achieve the minimum requirements by 22 degrees. Additional care taken to follow MOU requirements.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   030 Soda Ash Unloading System

2. Specific Permit Condition: **III.J.22 (1050059-069-AV), III.H.5 (1050059-075-AV)**

3. Description of the requirement in the specific condition:

Record pressure drop across the baghouse daily

4. Basis for determination of noncompliance:

Pressure drop not recorded daily

5. Beginning and ending dates of periods of noncompliance:

Period: 4/12 to 12/31 (34 days)

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

Soda ash system was associated with Multifos production. Multifos ceased operation on 1/31/12. During the demolition of Multifos the instrumentation utilized to record the soda ash pressure drop was retained and later connected to current system for AFI which was not properly connected to the archive.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   039 Phosphoric Acid Plant No. 3

2. Specific Permit Condition: **III.MACT.AA.1 (1050059-075-AV)**

3. Description of the requirement in the specific condition:

   Scrubber operating ranges established pursuant to Alternative Monitoring Plan

4. Basis for determination of noncompliance:

   Fan Amps > Max allowed

5. Beginning and ending dates of periods of noncompliance:

   Period: 12/12

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

   The maximum was exceeded by 2 amps after startup making the daily average high. Startup of the plant followed a scheduled maintenance which included cleaning of the scrubber packing which resulted in low pressure drop and high volumetric flow (fan amps) through the scrubber.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

   None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   042 Sulfuric Acid Plant No. 4

2. Specific Permit Condition: **III.A.7.1 (1050059-075-AV)**

3. Description of the requirement in the specific condition:

   < 4 lb/ton 3 hr avg excess emission within 2 hrs of startup

4. Basis for determination of noncompliance:

   > 4 lb/ton SO2 3 hr avg for > 2 hours during startup

5. Beginning and ending dates of periods of noncompliance:

   Period: 11/19 (0.25 hr)

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

   SO2 lb/ton 3 hour avg exceeded 4 lb/ton 2 hr allowed excess emissions for 0.25 hrs. Actions were taken to minimize these emissions. Subsequently the plant was shutdown when the excess emissions did not reduce.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

   None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   042 Sulfuric Acid Plant No. 4

2. Specific Permit Condition: **III.A.6.1 (Att. A, MOU 3) (1050059-069-AV)**

3. Description of the requirement in the specific condition:

   MOU requires < 4 lb/ton within 3 hours after startup.

4. Basis for determination of noncompliance:

   Instantaneous Lb/ton > 4 for 3.5 hours.

5. Beginning and ending dates of periods of noncompliance:

   Period: 10/27

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

   Startup emissions reached intantenous compliance at the MOU 3 hour period end but then subsequently increased for 0.5 hours. Actions were taken to minimize these emissions according to the MOU.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

   None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   042 Sulfuric Acid Plant No. 4

2. Specific Permit Condition: **III.A.6.1 (Att. A, MOU 3) (1050059-069-AV), III.A.7.1 (Appendix MOU)**

3. Description of the requirement in the specific condition:

MOU establishes minimum temperatures for catalyst masses for startups

4. Basis for determination of noncompliance:

Catalyst masses temperatures < MOU minimum

5. Beginning and ending dates of periods of noncompliance:

Period: 10/12, 10/29, 11/9

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

The temperature of the catayst masses did not achieve the minimum requirements by 6 to 25 degrees. Additional care taken to follow MOU requirements.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   044 Sulfuric Acid Plant No. 5

2. Specific Permit Condition: **III.A.7.1 (Appendix MOU) (1050059-075-AV)**

3. Description of the requirement in the specific condition:

   MOU establishes minimum temperatures for catalyst masses for startups

4. Basis for determination of noncompliance:

   Catalyst masses temperatures < MOU minimum

5. Beginning and ending dates of periods of noncompliance:

   Period: 11/10

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

   The temperature of the catayst masses did not achieve the minimum requirements by 16 degrees. Additional care taken to follow MOU requirements.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

   None

Annual Certification for Periods of Noncompliance

January-December 2012

1050059 New Wales Plant

1. Emissions Unit Identification Number:

   044 Sulfuric Acid Plant No. 5

2. Specific Permit Condition: **III.A.6.1 (Att. A, MOU 3) (1050059-069-AV)**

3. Description of the requirement in the specific condition:

   MOU requires < 4 lb/ton within 3 hours after startup.

4. Basis for determination of noncompliance:

   Instantaneous Lb/ton > 4 for 5 hours.

5. Beginning and ending dates of periods of noncompliance:

   Period: 6/26 (5 hours)

6. Identification of the probable cause of noncompliance and description of corrective action or preventive measured implemented:

   Startup emissions reached intantenous compliance at the MOU 3 hour period end but then subsequently increased for 1.75 hours. Actions were taken to minimize these emissions according to the MOU. The plant was shutdown when the excess emissions did not reduce.

7. Dates of any reports previously submitted identifying this incident of noncompliance:

   July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

002 Sulfuric Acid Plant No. 1

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

044 Sulfuric Acid Plant No. 5

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours due to a malfunction

2. Dates of any reports previously submitted identifying this incident of deviation:

None

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

044 Sulfuric Acid Plant No. 5

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

None

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

044 Sulfuric Acid Plant No. 5

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours due to a malfunction

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

044 Sulfuric Acid Plant No. 5

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

042 Sulfuric Acid Plant No. 4

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

042 Sulfuric Acid Plant No. 4

1. Description of incident of deviation.

CEM malfunction.

2. Dates of any reports previously submitted identifying this incident of deviation:

April 27, 2012 Quarterly Continuous Emission Monitor Report.

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

042 Sulfuric Acid Plant No. 4

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

None

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

004 Sulfuric Acid Plant No. 3

1. Description of incident of deviation.

CEM malfunction.

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

004 Sulfuric Acid Plant No. 3

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

003 Sulfuric Acid Plant No. 2

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

None

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

003 Sulfuric Acid Plant No. 2

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

July 30, 2012 Quarterly Continuous Emission Monitor Report; July 30, 2012 Semiannual Report

Annual Certification for Periods of Deviation

January-December 2012

1050059 New Wales Plant

Emissions Unit Identification Number:

002 Sulfuric Acid Plant No. 1

1. Description of incident of deviation.

> 4 lb/ton SO2 3 hr avg for < 2 hours during startup

2. Dates of any reports previously submitted identifying this incident of deviation:

None