Florida Department of
Environmental Protection

Memorandum

TO: Trina L. Vielhauer

THRU: Jeff Koerner JK

FROM: Syed Arif Syed Arif 11/29/05

DATE: November 29, 2005

SUBJECT: PROPOSED Permit Project No.: 1050051-019-AV
U.S. Agri-Chemicals Corporation
Fort Meade Plant
Polk County

Attached is the proposed permit package for the Title V Permit Renewal for this facility. The Public Notice was published on October 20, 2005 in The Ledger . No comments were received on the Draft Permit.

We recommend your approval of the attached proposed Title V Permit Renewal.

JFK/sa

Attachments

Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

November 29, 2005

Mr. Phong Vo
General Manager
Engineering and Technical Services
U.S. Agri-Chemicals Corporation
3225 SR 630 West
Fort Meade, Florida 33841-9799

Re: PROPOSED Title V Permit No. **1050051-019-AV**
Fort Meade Plant

Dear Mr. Vo:

One copy of the PROPOSED Title V Air Operation Permit Renewal for the Fort Meade Plant located at 3225 SR 630 West, Fort Meade, Polk County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit renewal has become a PROPOSED permit renewal.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (U.S. EPA) Region 4 office's review. The web site address is:

http://www.dep.state.fl.us/air/permitting.htm

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit renewal is made by the USEPA within 45 days, the PROPOSED permit renewal will become a FINAL permit renewal no later than 55 days after the date on which the PROPOSED permit renewal was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit renewal, the FINAL permit renewal will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn. If you have any questions, please contact Syed Arif at 850/921-9528.

Sincerely,

Jeffery D. Koerner

FOR Trina L. Vielhauer, Chief
Bureau of Air Regulation

Enclosures

Copy furnished to:
Ms. Mara Nasca , DEP-SWD
Mr. John Koogler, P.E., Koogler & Associates
USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED Permit Renewal Determination
U.S. Agri-Chemicals Corporation
Fort Meade Plant
Title V Permit Renewal No. **1050051-019-AV**

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" to the U.S. Agri-Chemicals Corporation for the Fort Meade Plant, located at 3225 SR 630 West, Fort Meade, Florida, Polk County, was clerked on July 7, 2005. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was published in The Ledger on Thursday October 20, 2005. The DRAFT Title V Air Operation Permit Renewal was available for public inspection at the Department's South West District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT RENEWAL" was received on October 27, 2005.

II. Public Comment(s).

No comments were received from the applicant, citizens, environmental groups, municipalities or other agencies.

III. Conclusion.

The permitting authority hereby issues PROPOSED Permit Renewal No. **1050051-019-AV** with no changes.

STATEMENT OF BASIS

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant
Facility ID No.: 1050051
Polk County

Title V Air Operation Permit Renewal
PROPOSED Permit No.: 1050051-019-AV

This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above-named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of two phosphoric acid plants (A and B trains), a phosphoric acid tank farm, a prilled MAP plant, a granular MAP/DAP plant, a MAP/DAP loadout system, two sulfuric acid plants, an auxiliary boiler, a molten sulfur storage and handling system, and a lime silo. CAM does apply.

The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of construction permits, No. 1050051-009-AC/PSD-FL-278, issued on February 6, 2001; air construction permit, No. 1050051-015-AC/PSD-FL-321, issued on March 15, 2002; and the incorporation of a Compliance and Monitoring Requirement (CAM).

Air Construction Permit No. 1050051-009-AC/PSD-FL-278 increases the production rate of the existing Sulfuric Acid Plants Nos. 1 and 2 to 3000 tons per day, each; increases the production rate of the existing Phosphoric Acid Plants A and B from 44 to 50 tons per hour P_2O_5 input, each; and a proportional increase in the processing rate of the Phosphoric Acid Tank Farm. The increase in Phosphoric Acid Plants A and B will become effective only after the applicant demonstrates compliance with all the requirements of the construction permit.

Air Construction Permit No. 1050051-015-AC/PSD-FL-321 increases the production rate of the granular MAP/DAP Plant from 50 to 60 tons per hour. The increase in granular MAP/DAP Plant will become effective only after the applicant demonstrates compliance with all the requirements of the construction permit.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received February 28, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63.

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

Facility ID No.: 1050051
Polk County

Title V Air Operation Permit Renewal

PROPOSED Permit Renewal No.: 1050051-019-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

Telephone: 813/744-6100
Fax: 813/744-6458

Title V Air Operation Permit Renewal
US Agri-Chemicals Corporation – Ft. Meade Chemical Plant
PROPOSED Permit Renewal No.: 1050051-019-AV

Table of Contents

Permittee:
U.S. Agri-Chemicals Corporation

PROPOSED Permit Renewal No.: 1050051-019-AV
Facility ID No.: 1050051
SIC Nos.: 28, 2874
Project: Title V Air Operation Permit Renewal

This permit renewal is for the operation of the Ft. Meade Chemical Plant facility. This facility is located at 3225 State Road 630 West, Ft. Meade, Polk County; UTM Coordinates: Zone 17, 416.2 km East, 3068.7 km North; Latitude: 27° 44' 40" North, Longitude: 81° 51' 08" West.

This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above-named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
APPENDIX TV-5, TITLE V CONDITIONS (version dated 3/28/05)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/7/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/7/96)
FIGURE 1 - SUMMARY REPORT - GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)
CAM Appendix
Construction Permit 1050051-009-AC/PSD-FL-278
Construction Permit 1050051-015-AC/PSD-FL-321
40 CFR 63 Subparts A (General Provisions), AA (NESHAP for Phosphoric Acid Plants), and BB (Phosphate Fertilizer Plants)
40 CFR 61 Subpart A (General Provisions) and Subpart R (Radon Emissions from Phosphogypsum Stacks)

Effective Date: To be determined
Renewal Application Due Date: March 13, 2008
Expiration Date: September 9, 2008

Michael G. Cooke, Director
Division of Air Resource Management

MGC/sa

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two phosphoric acid plants (A and B trains), a phosphoric acid tank farm, a prilled MAP plant, a granular MAP/DAP plant, a MAP/DAP loadout system, two sulfuric acid plants, an auxiliary boiler, a molten sulfur storage and handling system, and a lime silo. Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the Title V Air Operation Permit Renewal application received February 28, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63.

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
-005	Phosphoric Acid Plant A-Train
-006	Auxiliary Boiler
-016	Sulfuric Acid Plant #1
-017	Sulfuric Acid Plant #2
-020	Phosphoric Acid Plant B-Train
-021	Phosphoric Acid Plant Tank Farm
-028	Molten Sulfur System -- Sulfur Tank
-029	Molten Sulfur System -- Sulfur Pit
-030	Molten Sulfur System -- Sulfur Rail Unloading
-031	Molten Sulfur System -- Sulfur Truck Unloading
-032	Prilled MAP/DAP Plant (includes MAP/DAP Storage & Loadout)
-033	Lime Silo
-035	Phosphogypsum Stack
-038	Granular MAP/DAP Plant

Unregulated Emissions Units and/or Activities

-036	Facility-Wide Fugitive Emissions

Note: Please refer to the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test-report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History / ID Number Transfers
Statement of Basis

These documents are on file with permitting authority:
Initial Title V Permit Application received June 13, 1996
Title V Permit Renewal Application received on February 28, 2003

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS (version dated March 28, 2005), is a part of this permit.
{Permitting note: APPENDIX TV-5, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

2. Not federally enforceable. General Pollutant Emission Limiting Standards.
Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

and,
b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68 and Rule 62-213.440(2), F.A.C.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

"Nothing was deemed necessary and ordered at this time."

[Rule 62-296.320(1)(a), F.A.C.]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-5, TITLE V CONDITIONS):
The following requirements are "not federally enforceable":

a. Maintenance of paved areas as needed;
b. Regular mowing of grass and care of vegetation; and,
c. Limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by the applicant in the initial Title V permit application received June 14, 1996]

9. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

10. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

11. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

12. The permittee shall not allow any person to circumvent any pollution control device nor allow the emissions of air pollutants without the applicable air pollution control device operating properly.
[Rule 62-210.650, F.A.C.]

13. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

14. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition 51. of APPENDIX TV-5, TITLE V CONDITIONS)}

Test Methods and Procedures

15. The requirements for stack sampling facilities, source sampling, and reporting, shall be in accordance with Chapter 62-297, F.A.C., *Stationary Sources - Emission Monitoring* and 40 CFR 60, Appendix A. [Rule 62-297.401, F.A.C.]

16. The visible emissions test shall be conducted by a certified observer and be a minimum of thirty minutes in duration, unless otherwise specified within. The test observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)2, F.A.C.]

17. Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the authority to operate at the permitted capacity. In no case shall the process or production rate exceed the maximum permitted process or production rate.
[Rules 62-4.070(3) and 62-297.310(2), F.A.C.]

18. If the Department of Environmental Protection, after investigation, has reason to believe (such as complaints, increased visible emissions, or questionable maintenance of control equipment) that any applicable emission standard is being violated, then the Department of Environmental Protection may require the permittee to conduct compliance tests which identify the nature and quantity of pollutant emissions and to provide a report on the results of the tests. [Rule 62-297.310(7)(b), F.A.C.]

Recordkeeping and Reporting Requirements

19. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted.
[Rules 62-297.310(7)(a)9 and 62-209.500(5), F.A.C]

20. The permittee shall submit to the Air Compliance Section of the Southwest District Office of the Department each calendar year, on or before March 1, a completed DEP Form 62-210.900 (5), an "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year containing the following information pursuant to Subsection 403.061(13), F.S.:

a. Annual amount of materials and/or fuels utilized;
b. Annual emissions (note calculation basis);
c. Any changes in the information contained in the permit.

[Rule 62-210.370(3)(a)1., F.A.C.]

21. Test Reports

a. The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Air Compliance Section of Southwest District Office of the Department and the applicable local program(s) on the results of each such test.

b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed or with the operating permit application, whichever is earlier.

c. The report shall provide sufficient detail on the emissions unit tested (at least the "Project", "Facility ID" and "Point ID") and the test procedures used to allow the Department to determine if the test report was properly conducted and the test results properly computed. Testing procedures shall be consistent with the requirements of Rule 62-297.310(7), F.A.C.

d. The test report, other than for an EPA or DEP Method 9 test, as a minimum, shall provide the following information:

1. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
2. The normal operating parameters of air pollution control devices installed on each emission unit (e.g., pressure drop, scrubber liquid flow rate, scrubber liquid pressure, total current, etc.), and the operating parameters of air pollution control devices during each test run.

Failure to submit the rates and actual operating conditions in the test report may invalidate the test and fail to provide reasonable assurance of compliance.
[Rules 62-297.310(8), F.A.C., and 62-4.070(3), F.A.C.]

22. Hours of Operation - Unless otherwise noted, all emission units are allowed to operate continuously, i.e., 8760 hours per year. [Rule 62-4.070(3), F.A.C.]

23. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day number one. [Rule 62-213.440, F.A.C.]

24. This facility is subject to the provisions of 40 CFR 60, Subpart A - General Provisions. A copy of 40 CFR 60, Subpart A - General Provisions is available from the Department upon request.

25. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office.

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-1352
Telephone: 813/744-6100
Fax: 813/744-6458

26. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

27. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

NOTES to PERMITTEE:

Based on a modeling study approved by the Department during application for the initial Title V permit, it was determined that emissions from this facility will not have a significant impact on the Hillsborough County Air Quality Maintenance Area and is therefore exempt from the PM RACT requirements in accordance with Rule 62-296.700(2)(b), F.A.C. It was demonstrated by modeling that the facility, which consisted of the following emission units, is exempt from RACT and thus will not have a significant impact on the Air Quality Maintenance Area. Because the PM-RACT rule applies to units in existence at the time the rule was enacted, new units are not evaluated.

Subsection	E.U. I.D. No.	Description	Particulate Matter (PM) Limit	
			lbs/hr	Tons per year
B	006	Auxiliary Boiler	20.0[1]	87.6[1]
D	028-031	Molten Sulfur Unloading, Storage and Handling System	5.57[2]	24.39[2]
E	032	Prilled MAP Plant	16.4[1]	71.7[1]
F	033	Lime Silo	13.87	0.14
Total			55.84	

[1]Emission limit based on BACT determination.
[2]Emission estimate for emission inventory and PSD purposes.

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test-report submittals, applications, etc.

Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Permit Renewal – Refer to Appendix TV-5, Condition 5.

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-005	Phosphoric Acid Plant A-Train
-020	Phosphoric Acid Plant B-Train
-021	Phosphoric Acid Plant Tank Farm

The maximum permitted process input rate for Phosphoric Acid Plants A and B is 44 tons per hour (1,056 tons per day as P_2O_5) for each plant. Fluoride emissions from phosphoric acid production are controlled by a 12,000 ACFM venturi scrubber at each plant.

Two phosphoric acid production trains, designated as "A" and "B", produce the acid stored in the tank farm. Three filters, designated as "A", "B", and "C", are located in the Phosphoric Acid Filter Building.

The phosphoric acid tank farm at the Fort Meade plant is used for the storage of phosphoric acid and fluorosilicic acid. The tank farm consists of: 2-54% product tanks, 1-29% storage tank, 1-29% or 40% storage tank, 1-40% storage tank, 3-40% clarifier tanks, 2-29% clarifier tanks, 1–54% clarifier tank, 2-phosphoric acid mix tanks, and 2-fluorosilicic acid tanks. Fluoride emissions from the tank farm are controlled by a venturi scrubber that exhausts at approximately 6,000 ACFM. The scrubber uses pondwater as the scrubbing liquid.

The phosphoric acid evaporator system (Nos. 1 through 5) concentrates acid from both A-Train and B-Train Phosphoric Acid Plants. It can be used to concentrate 29% acid to 40% acid or 40% acid to 52% acid or 29% acid to 52% acid. The phosphoric acid evaporator system consists of evaporators, hydrofluorosilicic acid (FSA) towers, FSA recirculation tanks, barometric condensers, inter-condensers, steam ejectors, ejector seal tanks, and hot well sumps. Fluoride emissions from the FSA recirculation tank are vented to the A-Train scrubber. There is an insignificant amount of fugitive fluoride emissions from the hot-well sumps and the ejector seal tanks.

{**Note**: These emissions units are regulated under NSPS - 40 CFR 60, Subpart T, Standards of Performance for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)25, F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-296.403, F.A.C., Phosphate Processing, and 40 CFR 63 Subpart AA, Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA take precedence over NSPS standards, but will not take precedence over BACT determinations. However these units are subject to all applicable NSPS standards if these units are out of compliance with the NESHAP. State Implementation Plan (SIP) rules (Rule 62-296.403, F.A.C) apply if these units are out of compliance with the NSPS standards or if there is no applicable NSPS standard when out of compliance with the NESHAP}**

Subsection A1. The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Capacity. The maximum process input rate of phosphorus bearing feed material to either Plant A or Plant B shall not exceed 44 tons per hour as P_2O_5 on a 24-hour basis (1,056 tons per day). [Rules 62-4.160(2) and 62-210.200, F.A.C.; Definition-(PTE); AC53-103830 & -103831]
{**Note:** The maximum throughput rate for the tank farm is limited by the process rate from the "A" and "B" phosphoric acid production trains.}

A.2. Hours of Operation. Hours of operation shall not exceed the following (effective as of the date of revision under FDEP project no. 013, as shown on page 2 of 11):

a. Phosphoric acid production equipment - 7,968 hours/year.
b Evaporation and tank farm - 8,760 hours/year.
c. Phosphoric acid belt filter (Filter "C") - 8760 hours/year.

[Rule 62-210.200, F.A.C., Definitions - (PTE), Permits AC53-103830, AC53-103831, 1050051-005-AC]

Emission Limitations and Standards

A.3. Total fluoride emissions[1] from each phosphoric acid plant (Plant A or Plant B) shall not exceed any of the following:

a. 0.02 pound per ton of "equivalent P_2O_5 feed"[2];
b. 0.88 pound per hour;
c. 21.1 pounds per day;
d. 3.5 tons per year.

Fluoride emissions from each plant (Plant A or B) shall be defined as the sum of the fluoride emissions from the (Plant A and Plant B) phosphoric acid production facilities and one half of the fluoride emissions from the clarification and storage areas.
[AC53-103830, AC53-103831, Rule 204.800(7)(b)25, F.A.C., and 40 CFR 60.202(a)].

A.4. Visible emissions from the Phosphoric Acid Plant A and Plant B scrubber exhausts, phosphoric acid plant tank farm, and associated processing equipment shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

Test Methods and Procedures

A.5. The permittee shall test all three stacks simultaneously or within 5 days for fluoride emissions and visible emissions annually, on or during the 60 day period prior to November 29. The three stacks to be tested are the clarification and storage tank farm venturi scrubber stack and the "A" and "B" production trains' venturi scrubber stacks. [Permit AC53-103831; Rules 62-297.310(7)(a)4 and 62-4.070(3), F.A.C.]

A.6. Compliance with the fluoride and visible emissions limitations of Conditions A.3 and A.4 shall be determined using EPA Methods 1, 2, 4, 9, and 13A or 13B as contained in 40 CFR 60, App. A, (adopted by reference in Ch. 62-297, F.A.C). The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. The minimum requirements for stack sampling facilities, sampling and reporting, shall be in accordance with Ch. 62-297, F.A.C. and 40 CFR 60, App. A.

Monitoring of Operations

A.7. In order to provide reasonable assurance, when the phosphoric acid plants (Trains A and B) and the clarification and storage tank farm are operating, that the pollution control system is operating properly, the permittee shall comply with the minimum and maximum values of pressure drop that have been established by compliance tests, approved by the Department, and maintained in the Department's file with the current permit. This schedule, which is identified as Table 2-1, may be revised upon request from the permittee and written approval from the Department. (Effective as of the date of revision under FDEP project no. 013, as shown on page 2 of 11.)
[Rule 62-4.070(3), F.A.C.; Permit Nos. 1050051-011-AC and 1050051-012-AC].

A.8. In order to provide reasonable assurance that the pollution control system is operating properly, the permittee shall create and keep a record log of the scrubber operating parameters for each scrubber. The record log shall contain, at a minimum:

a. the volumetric liquid flow rate (gallons per minute),
b. the scrubber pressure drop (inches of water),
c. the date and time of the measurements, and
d. the name of the person responsible for performing the measurements.

A log entry shall be made at least once for every 8-hour shift that either Phosphoric Acid Plant Train A or B operates.

NOTE: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this condition.
[Rules 62-4.070(3), 62-4.160(14)(b), 62-4.160(14)(c), and 62-213.440(1)(b)2, F.A.C.]

Continuous Monitoring Requirements

A.9. The permittee shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The monitoring device shall have an accuracy of $\pm$5% over its operating range.
[Rule 62-204.800(7)(b)26, F.A.C.; 40CFR60.203(a)]

A.10. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across each venturi scrubbing system. The monitoring device shall have an accuracy of $\pm$5% over its operating range. [Rule 62-204.800(7)(b)26, F.A.C.; 40CFR60.203(c)]

Recordkeeping and Reporting Requirements

A.11. The permittee shall maintain a daily record of the "equivalent P_2O_5 feed" [(2)] rate for Phosphoric Acid Plant Trains A and B according to the procedure specified in 40CFR60.203(b)- Monitoring of Operations. This daily log shall be maintained at the facility and shall be made available to the Department upon request.
[40CFR60.203 and Rules 62-4.070(3) and 62-204.800(7)(b)26, F.A.C.]

A.12. The monitoring devices required by Conditions A.9 and A.10 for the equivalent P_2O_5 feed rate and the total pressure drop measurement across the scrubber are considered inoperative when they are out-of-service or fail to produce valid data. Upon the occurrence of 48 consecutive hours of continuous monitoring system downtime, the permittee shall notify the Air Compliance Section, Southwest District Office of the Department of Environmental Protection by 5:00 p.m. on the Department's next business day, of the incident and specify the corrective action being pursued. [Rules 62-4.130, and 62-4.160(8), F.A.C.]

Notify: Air Compliance Supervisor
Southwest District Office
Department of Environmental Protection
Telephone: (813) 744-6100
FAX: (813) 744-6458

A.13. All test reports submitted to the Department shall include, at a minimum, the following information for the test period:

a. the production rate ("equivalent P_2O_5 feed"[(2)] rate),
b. the input rate to the tank farm,
c. the tank farm unloading rate, and
d. for each scrubber
   1. type of scrubber liquid,
   2. volumetric liquid flow rate (gpm) and/or water pressure (psig), and
   3. gas pressure drop ("w.g.).

[Permit Nos. AC53-103830 and AC53-103831; Rules 62-4.070(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

Failure to submit the above information, or operation at conditions which do not reflect normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance. [Rule 62-4.070(3), F.A.C.]

Reasonable Assurances

A.14. The wetted area in the gypsum disposal area and the process cooling pond shall not be increased without prior approval from the Department.
[Rule 62-4.070(3), F.A.C.; Permit Nos. AC53-103830 and AC53-103831]

A.15. All reasonable precautions shall be taken to minimize and control the generation of fugitive fluoride emissions. [Rule 62-4.070(3), F.A.C.]

Compliance Assurance Monitoring

A.16. Except when all of the requirements of paragraphs a. - c. of this condition are being met, E.U Nos. 005 and 020 are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

a. The emissions units are in compliance with all applicable sections of Subpart AA.
b. All of the monitoring requirements of 40 CFR 63.605 are being met.

c. The Baseline average value determined as a requirement of 40 CFR 63.606(c)(4), (d)(4) or (e)(2), +/-20%, is within the indicator ranges specified in the CAM Appendix.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

(1) **"Total Fluoride Emissions"** - elemental fluorine and all fluoride compounds as measured by reference methods specified in 40 CFR 60.204, or equivalent or alternative methods.

(2) **"Equivalent P_2O_5 Feed Rate"** - the quantity of phosphorus, expressed as phosphorous pentoxide, feed to the process.

Subsection A2. The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.0. All of the terms and conditions of permit number 1050051-009-AC; PSD-FL-278 are a part of this permit (see attachment 1050051-009-AC; PSD-FL-278).

Operation of the emissions unit(s) listed above beyond the time frames established by permit number 1050051-009-AC/PSD-FL-278 is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the emissions unit(s) was completed in accordance with permit number 1050051-009-AC/PSD-FL-278 and 2) the unit has been tested and compliance with the terms and conditions contained within permit number 1050051-009-AC/PSD-FL-278 has properly been demonstrated.
[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C.]
Note: Subsection A1 can be removed once Subsection A2 is applicable.

A.1. Capacity. The maximum process input rate of phosphorus bearing feed material to either Plant A or Plant B shall not exceed 50 tons per hour as P_2O_5 input on a 30-day rolling average basis and 55 tons per hour maximum. Maximum annual rate shall not exceed 438,000 tons P_2O_5 input. The maximum process input rate to the Phosphoric Acid Plant Tank Farm shall not exceed 100 tons per hour as P_2O_5 input on a 30-day rolling average and 110 tons per hour maximum. Maximum annual rate shall not exceed 876,000 tons P_2O_5 input.
[Rules 62-4.160(2) and 62-210.200, F.A.C.; Definition-(PTE); Permit 1050051-009-AC; PSD-FL-278]

A.2. Hours of Operation. The subject emission units are allowed to operate continuously (8,760 hours/year).
[Rule 62-210.200, F.A.C., Definitions - (PTE), Permit 1050051-009-AC; PSD-FL-278]

Emission Limitations and Standards
A.3. Total fluoride emissions[1] from each phosphoric acid plant (Plant A or Plant B) shall not exceed any of the following:

a. 0.012 pound per ton P_2O_5 input;
b. 0.6 pound per hour;
c. 2.63 tons per year.

Total fluoride emissions from the Phosphoric Acid Tank Farm shall not exceed 1.0 pound per hour and 4.38 tons per year.
[Permit 1050051-009-AC; PSD-FL-278, Rule 204.800(7)(b)25, F.A.C., and 40 CFR 60.202(a)].

A.4. Visible emissions from the Phosphoric Acid Plant A and Plant B scrubber exhausts, phosphoric acid plant tank farm, and associated processing equipment shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

Test Methods and Procedures

A.5. The permittee shall test all three stacks simultaneously or within 5 days for fluoride emissions and visible emissions annually, on or during the 60 day period prior to November 29. The three stacks to be tested are the clarification and storage tank farm venturi scrubber stack and the "A" and "B" production trains' venturi scrubber stacks. [Permit AC53-103831; Rules 62-297.310(7)(a)4 and 62-4.070(3), F.A.C.]

A.6. Compliance with the fluoride and visible emissions limitations of Conditions A.3 and A.4 shall be determined using EPA Methods 1, 2, 4, 9, and 13A or 13B as contained in 40 CFR 60, App. A, (adopted by reference in Ch. 62-297, F.A.C). The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. The minimum requirements for stack sampling facilities, sampling and reporting, shall be in accordance with Ch. 62-297, F.A.C. and 40 CFR 60, App. A.

Monitoring of Operations

A.7. In order to provide reasonable assurance, when the phosphoric acid plants (Trains A and B) and the clarification and storage tank farm are operating, that the pollution control system is operating properly, the permittee shall comply with the minimum and maximum values of pressure drop that have been established by compliance tests, approved by the Department, and maintained in the Department's file with the current permit. This schedule, which is identified as Table 2-1, may be revised upon request from the permittee and written approval from the Department. (Effective as of the date of revision under FDEP project no. 013, as shown on page 2 of 11.)
[Rule 62-4.070(3), F.A.C.; Permit Nos. 1050051-011-AC and 1050051-012-AC].

A.8. In order to provide reasonable assurance that the pollution control system is operating properly, the permittee shall create and keep a record log of the scrubber operating parameters for each scrubber. The record log shall contain, at a minimum:

a. the volumetric liquid flow rate (gallons per minute),
b. the scrubber pressure drop (inches of water),
c. the date and time of the measurements, and
d. the name of the person responsible for performing the measurements.

A log entry shall be made at least once for every 8-hour shift that either Phosphoric Acid Plant Train A or B operates.

The down time on the Phosphoric Acid Tank Farm scrubber, when the Tank Farm is operating, may exceed 2 hours in a 24-hour period for maintenance purposes only.

NOTE: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this condition.
[Permit 1050051-009-AC; PSD-FL-278; Rules 62-4.070(3), 62-4.160(14)(b), 62-4.160(14)(c), and 62-213.440(1)(b)2, F.A.C.]

Continuous Monitoring Requirements

A.9. The permittee shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process. The monitoring device shall have an accuracy of ±5% over its operating range.
[Rule 62-204.800(7)(b)26, F.A.C.; 40CFR60.203(a)]

A.10. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across each venturi scrubbing system. The monitoring device shall have an accuracy of ±5% over its operating range. [Rule 62-204.800(7)(b)26, F.A.C.; 40CFR60.203(c)]

Recordkeeping and Reporting Requirements

A.11. The permittee shall maintain a daily record of the "equivalent P_2O_5 feed" [(2)] rate for Phosphoric Acid Plant Trains A and B according to the procedure specified in 40CFR60.203(b)- Monitoring of Operations. This daily log shall be maintained at the facility and shall be made available to the Department upon request.
[40CFR60.203 and Rules 62-4.070(3) and 62-204.800(7)(b)26, F.A.C.]

A.12. The monitoring devices required by Conditions A.9 and A.10 for the equivalent P_2O_5 feed rate and the total pressure drop measurement across the scrubber are considered inoperative when they are out-of-service or fail to produce valid data. Upon the occurrence of 48 consecutive hours of continuous monitoring system downtime, the permittee shall notify the Air Compliance Section, Southwest District Office of the Department of Environmental Protection by 5:00 p.m. on the Department's next business day, of the incident and specify the corrective action being pursued.
[Rules 62-4.130, and 62-4.160(8), F.A.C.]

Notify: Air Compliance Supervisor
Southwest District Office
Department of Environmental Protection
Telephone: (813) 744-6100
FAX: (813) 744-6458

A.13. All test reports submitted to the Department shall include, at a minimum, the following information for the test period:

a. the production rate ("equivalent P_2O_5 feed"[(2)] rate),
b. the input rate to the tank farm,
c. the tank farm unloading rate, and
d. for each scrubber
   1. type of scrubber liquid,
   2. volumetric liquid flow rate (gpm) and/or water pressure (psig), and
   3. gas pressure drop (" w.g.).

[Permit Nos. AC53-103830 and AC53-103831; Rules 62-4.070(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

Failure to submit the above information, or operation at conditions which do not reflect normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rule 62-4.070(3), F.A.C.]

A.14. The permittee shall submit for a minimum period of one year additional ambient fluorides monitoring data. The samples collection shall follow the protocol as described in Koogler & Associates letter of January 26, 2001. The data gathering shall begin from the initial performance test and shall include additional twelve monthly data points. The last data shall be collected at the time of the first annual compliance test. Emission units 005 and 020 shall be operated at permitted capacity concurrently during the initial performance test and the first annual compliance test. A total of a minimum of fourteen (14) data points shall be submitted to the Bureau of Air Regulation.
[Permit 1050051-009-AC; PSD-FL-278; Rule 62-212.400(5)(f), F.A.C.]

Reasonable Assurances

A.15. The wetted area in the gypsum disposal area and the process cooling pond shall not be increased without prior approval from the Department.
[Rule 62-4.070(3), F.A.C.; Permit Nos. AC53-103830 and AC53-103831]

A.16. All reasonable precautions such as preventing acid spill and repairing duct leaks to minimize and control the generation of fugitive fluoride emissions. [Rule 62-4.070(3), F.A.C.]

Compliance Assurance Monitoring

A.17. Except when all of the requirements of paragraphs a. - c. of this condition are being met, E.U Nos. 005 and 020 are subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

a. The emissions units are in compliance with all applicable sections of Subpart AA.
b. All of the monitoring requirements of 40 CFR 63.605 are being met.
c. The Baseline average value determined as a requirement of 40 CFR 63.606(c)(4), (d)(4) or (e)(2), +/-20%, is within the indicator ranges specified in the CAM Appendix.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

(1) **"Total Fluoride Emissions"** - elemental fluorine and all fluoride compounds as measured by reference methods specified in 40 CFR 60.204, or equivalent or alternative methods.

(2) **"Equivalent P_2O_5 Feed Rate"** - the quantity of phosphorus, expressed as phosphorous pentoxide, feed to the process.

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-006	Auxiliary Boiler

The design steam capacity of the Babcock & Wilcox Auxiliary Boiler is 70,000 pounds per hour. This boiler is fired with natural gas or No. 2 fuel oil. The maximum heat input rate to this boiler is 100.0 MMBtu per hour. The sulfur content of the new No. 2 fuel oil shall not exceed 0.5% weight.

{Permitting note(s): These emissions units are regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The maximum heat input to the Babcock & Wilcox Auxiliary Boiler shall not exceed 100.0 MMBtu per hour.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

B.2. Hours of Operations

a. The hours of operation for this emissions unit shall not exceed 840.0 hours in any 12 consecutive month period while fired on No. 2 fuel oil.
b. This emissions unit is permitted to be fired on natural gas continuously, 8,760 hours per year.

[Rule 62-210.200, F.A.C., Definitions - (PTE), Air Construction Permit AC53-33822]

B.3. Methods of Operation - (i.e., Fuels).

a. This emissions unit shall be fired only with natural gas and new No. 2 fuel oil.
b. The fuel oil shall contain no more than 0.5% sulfur, by weight.

New oil means an oil that has been refined from crude oil and has not been used and which may or may not contain additives. Waste/Recycled oil shall be not fired in this process steam boiler without prior approval from the Department.
[Rules 62-4.160(2), F.A.C., 62-213.440(1), F.A.C., and 62-296.406(2) and (3), F.A.C., Air Construction Permit AC53-33822/BACT Determination 11/10/80.]

Emission Limitations and Standards

B.4. Visible emissions shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%.
[Rule 62-296.406(1), F.A.C., BACT Determination 11/10/80].

B.5. Emissions from the Auxiliary Boiler shall not exceed the following:

POLLUTANT	EMISSION LIMIT (pounds per MMBtu Input to the Boiler)
Sulfur dioxide (SO_2)	0.51
Nitrogen oxides (NO_x)	0.3
Particulate Matter	0.2

[Pursuant to the BACT Determination issued November 10, 1980, AC53-33822]

Test Methods and Procedures

B.6. The Auxiliary Boiler shall be tested for visible emissions and sulfur oxides* annually, on or during the 60 day period prior to May 18.
*In lieu of a sulfur oxides stack test, the Department will accept a fuel analysis and calculations proving compliance with the maximum sulfur content specified in Condition B.3 and the SO_2 limitations specified in Condition B.5 (See Condition B.8).
[Rule 62-297.310(7)(a)4, F.A.C.]

B.7. Compliance with the visible emission (VE) limitation of Condition B.4 shall be determined using DEP Method 9 contained in Rule 62-297, F.A.C. The visible emissions test shall be conducted by a certified observer and be a minimum of sixty (60) minutes in duration. The visible emissions test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur (i.e., period when it is cycling up to a normal high firing rate, or it is continuously operating at a high firing rate). The minimum requirements for stationary point source emission test procedures and reporting shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60 Appendix A.
[Rules 62-297, F.A.C. and 62-4.070(3), F.A.C.].

B.8. Compliance with the sulfur content limitation of Condition B.3 shall be demonstrated during the visible emission compliance test by submitting either of the following with the visible emission test report:

a. A Certificate of Fuel Oil Analysis indicating the weight percent sulfur content and heat content from the fuel oil supplier for the fuel oil used during the compliance test.

b. A Certificate of Fuel Oil Analysis for an as-burned fuel oil sample taken during the compliance test indicating the weight percent sulfur content and the heat content.

[Rule 62-4.070(3), F.A.C.]

B.9. The annual visible emissions compliance test could be waived, on a year by year basis, if fuel oil has not been fired in this boiler for more than 400 hours for the previous 12 months and if it is not expected to be fired in this boiler for more than 400 hours during the next 12 months. Each year, when the VE test is due, a letter must be sent to Southwest District Office of the Department stating that the above limitations for the waiver have been satisfied. Regardless of fuel usage, a visible

emissions test shall be conducted during the six month period prior to the expiration date of this permit.

NOTE: If the annual visible emissions compliance test required in Condition B.6 was conducted while firing natural gas or was waived, a visible emissions compliance test shall be conducted while firing fuel oil within 30 days of the 15th day the boiler was fired on fuel oil.
[Rule 62-296.310, F.A.C.]

Recordkeeping and Reporting Requirements

B.10. The permittee shall submit a statement of the fuel in use, and the fuel heat input rate for each boiler, as a part of the compliance test report. Failure to submit the fuel in use, heat input rate, fuel oil sulfur content, input mode and an actual operation mode statement, or operating at conditions which do not reflect the normal operating conditions, may invalidate the test and fail to provide reasonable assurance of compliance.
[Rule 62-4.070(3), F.A.C.]

B.11. In order to document compliance with Conditions B.1, B.2 and B.3, the permittee shall maintain daily records of the type of fuel fired; the quantity of fuel fired; the sulfur content, in % by weight, of the No. 2 fuel oil fired (Based on either vendor provided as-shipped analysis or on analysis of as-received samples taken at the plant); and the total hours of operation for the boiler by fuel type. Recording of daily records is required only on days that the auxiliary boiler is fired using fuel oil.
[Rule 62-4.070(3), F.A.C.]

Subsection C. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-016	Sulfuric Acid Plant #1
-017	Sulfuric Acid Plant #2

Sulfuric Acid Plants No. 1 and No. 2 are double absorption contact process systems. The SO_2 gas formed in the furnace by oxidation of molten sulfur is sent to the vanadium pentoxide converter to produce SO_3 gas. The SO_3 gas formed in the first three passes flows to the interpass absorber where most of the SO_3 is removed to produce sulfuric acid. The gas from the interpass absorber is returned to the converter and sent through another pass (fourth pass) where the remaining SO_2 gas undergoes additional conversion. The gas from the 4th pass flows to the final absorber before being discharged to the atmosphere. Each plant is permitted to produce 3,000 tons per day of sulfuric acid (100% H_2SO_4 basis). Acid mist emissions are controlled by a demister.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Capacity. The production rate of sulfuric acid for each plant, measured as 100% H_2SO_4, shall not exceed 3,000 tons per day (125 tons/hr daily hour basis).
[Construction permit 1050051-009-AC; PSD-FL-278, Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Emission Limitations and Standards

C.2. Visible emissions from each plant shall not be equal to or greater than 10% opacity.
[Rule 62-204.800(7)(b)10., F.A.C., and 40 CFR 60.83(a)(2), Construction Permit 1050051-009-AC; PSD-FL-278]

C.3. Sulfur dioxide emissions from each plant shall not exceed any of the following:

a. 3.5 pounds per ton of 100% H_2SO_4 produced averaged over three hours;
b. 437.5 pounds per hour;
c. 1,916 tons per year.

[Rule 62-204.800(7)(b)10, F.A.C., 40 CFR 60.82(a), Construction permit 1050051-009-AC; PSD-FL-278]

C.4. Acid (H_2SO_4) mist emissions for each plant shall not exceed any of the following:

a. 0.12 pounds per ton of 100% H_2SO_4 produced;
b. 15 pounds per hour;
c. 65.7 tons per year.

[Rule 62-204.800(7)(b)10, F.A.C., 40 CFR 60.83(a)(1), Construction permit 1050051-009-AC; PSD-FL-278]

C.5. Nitrogen oxides emissions from each plant shall not exceed any of the following:
a. 0.12 pounds per ton of 100% H_2SO_4;
b. 15 pounds per hour;
c. 65.7 tons per year.
[Construction permit 1050051-009-AC; PSD-FL-278]

Test Methods and Procedures

C.6. Test the emissions from each plant for the following pollutants, annually, on or during the 60 day period prior to November 12.
a. Visible Emissions
b. Sulfur Dioxide
c. Acid Mist
[Rule 62-297.310(7)(a)4, F.A.C.]

C.7. The emissions from each sulfuric acid plant shall be tested for nitrogen oxides (NO_x) every five years prior to obtaining a renewed operation permit.
[Rule 62-297.310(7)(a)3, F.A.C.]

C.8. Compliance with the emission limitations of Conditions C.2, C.3, C.4, and C.5 shall be determined in accordance with 40 CFR 60.85 using EPA Methods 1, 2, 3, 4, 7 or 7E, 8, and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A.
[Rule 62-297, F.A.C.]

Monitoring of Operations

C.9. For each plant, the permittee shall establish a conversion factor for the purpose of converting sulfur dioxide monitoring data into the units of the applicable standard (lb/ton). The conversion factor shall be determined, at a minimum, three times daily in accordance with 40 CFR 60.84(b). A record of all conversion factors and values from which they were calculated shall be maintained.
[Rules 62-204.800(7)(b)10., 62-213.440(1)(b)2.b, F.A.C., and 40 CFR 60.84]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS provision.}

C.10. Excess emissions resulting from startup, shutdown, or malfunction are permitted providing: (1) best operational practices to minimize emissions are adhered to and; (2) the duration of excess emissions are minimized. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. In case of excess emissions resulting from malfunctions, the permittee shall notify the Department 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.
[Rules 62-210.700(1), (4), and (6), F.A.C.]

C.11. Best operational practices to minimize leaks of sulfur dioxide and sulfur trioxide shall be adhered to and shall include regular inspections and the prompt repair or correction of any leaks or other fugitive emissions.
[Rule 62-4.070(3), F.A.C.]

Continuous Monitoring Requirements
C.12. For each plant, a continuous emission monitoring system for the measurement of sulfur dioxide shall be calibrated, maintained and operated as specified in 40 CFR 60.84. The span value of the continuous monitor shall be set at 1000 ppm.
[Rules 62-204.800(7)(b)10 and 62-297.500, F.A.C., and 40 CFR 60.84]

Recordkeeping and Reporting Requirements
C.13. In order to document ongoing compliance with the emission limitations of Condition C.3, the permittee shall maintain monthly records of Sulfuric Acid Plant sulfur dioxide (SO_2) emissions for each emission unit. The records shall include the following for each day of the month:

a. daily acid production (in tons as 100% H_2SO_4);
b. hours operated;
c. daily average pounds/hour SO_2 emission rate;
d. a calculation of the monthly average SO_2 emission rate in pounds/ton of 100% H_2SO_4 produced;
e. a calculation of the monthly average pounds/hour SO_2 emission rate;
f. a calculation of the SO_2 emissions in tons per year.

[Rule 62-4.070(3), F.A.C]

C.14. For each plant, the permittee shall submit a written report of excess sulfur dioxide emissions each calendar quarter in accordance with 40 CFR 60.7 (b) and (c) and Rule 62-296.402(4), F.A.C. Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standard under 40 CFR 60.82. The excess emission report shall also include a statement of all periods during the quarter when the sulfur dioxide monitoring system was inoperative. The quarterly sulfur dioxide excess emission report shall be submitted to the Southwest District Office of the Department. All reports shall be postmarked by the 30th day following the end of each calendar quarter.
[Rules 62-204.800(7)(b)10, F.A.C., 62-213.440(1)(b)2.b, and 40 CFR 60.7 and 60.84(e)]

C.15. For each plant, the permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system (sulfur dioxide) or monitoring device is inoperative. Records on monitoring system performance evaluations, calibrations and maintenance shall be maintained in accordance with 40 CFR 60.7(d).
[Rules 62-204.800(7)(b)10 and 62-213.440(1)(b)2.b, F.A.C. and 40 CFR 60.7]

C.16. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection.
[Rules 62-204.800(7)(b)10 and 62-213.440(b)2.b, F.A.C. and 40 CFR 60.7(d)]

Operational Procedures

C.17. Not federally enforceable. The permittee shall comply with the MEMORANDUM OF UNDERSTANDING REGARDING BEST OPERATIONAL START-UP PRACTICES FOR SULFURIC ACID PLANTS; [Signed and Executed on December 4, 1989, Rules 62-4.070(3) and 62-210.700(1), F.A.C.]

Not federally enforceable.

MEMORANDUM OF UNDERSTANDING
REGARDING BEST OPERATIONAL START-UP PRACTICES
FOR SULFURIC ACID PLANTS

These Sulfuric Acid Plant Best Operation Start-Up Practices will be made available in the control room at all times.

1. Only one sulfuric acid plant at a facility should be started up and burning sulfur at a time, there are times when it will be acceptable for more than one sulfuric acid plant to be in the start-up mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting SO_2 at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the immediately preceding 20 minutes.

2. A plant start-up must be at the lowest practicable operating rate, not to exceed 70 percent of the designated operating rate, until the SO_2 monitor indicates compliance, Because production rate is difficult to measure during start-up, if a more appropriate indicator (such as blower pressure, furnace temperature, gas strength, blower speed, number of sulfur guns operating, etc.) can be documented, tested and validated, the Department will accept this in lieu of directly documenting the operating rate. Implementation requires the development of a suitable list of surrogate parameters to demonstrate and document the reduced operating rate on a plant-by-plant basis. Documentation that the plant is conducting start-up at the reduced rate is the responsibility of the owner or operator.

3. Sulfuric acid plants are authorized to emit excess emissions from start-up for a period of three consecutive hours provided best operational practices, in accordance with this agreement, to minimize emissions are followed. No plant shall be operated (with sulfur as fuel) out of compliance for more than three consecutive hours, Thereafter, the plant shall be shut down, The plant shall be shut down (cease burning sulfur) if, as indicated by the continuous emission monitoring system, the plant is not in compliance within three hours of start-up, Restart may occur as soon as practicable following any needed repairs or adjustments, provided the corrective action is taken and properly documented.

4. Cold Start-Up Procedures.

a. Converter.

(1) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO_2 enters the masses, in no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F. These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.

(2) The gas stream entering the converter shall contain SO_2 at a level less than normal, and sufficiently low to promote catalytic conversion to SO_3.

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H_2SO_4.

5. Warm Restart.

a. Converter.

The inlet and outlet temperatures of the first two catalyst masses should be sufficiently high to ensure conversion. One of the following three conditions must be met:

(1) The first two catalyst masses inlet and outlet temperatures must be at a minimum of 700°F; or

(2) Two of the four inlet and outlet temperatures must be greater than or equal to 800°F; or

(3) The inlet temperature of the first catalyst must be greater than or equal to 600°F and the outlet temperature greater than or equal to 800°F. Also, the inlet and outlet temperatures of the second catalyst must be greater than or equal to 700°F.

Failure to meet one of the above conditions, requires use of cold start-up procedures.

To allow for technological improvements or individual plant conditions, alternative conditions will be considered by the Department in appropriate cases.

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved, in no event shall the concentration be less than 96 percent H_2SO_4.

Subsection D. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-028	Molten Sulfur System -- 4210 Short Ton Molten Sulfur Storage Tank (7 vents)
-029	Molten Sulfur System -- 229 short ton molten sulfur pit (5 exhaust vents)
-030	Molten Sulfur System -- railcar unloading system (1 exhaust vent)
-031	Molten Sulfur System -- truck unloading system (3 exhaust vents)

The molten sulfur unloading, storage, and handling system consists of one 229 short ton pit (4 vents), railcar unloading system (2 vents), truck unloading system (2 vents), one 4,210 short ton molten sulfur storage tank, , and the associated transfer pumps and piping.

Molten sulfur is unloaded from trucks or railcars to the molten sulfur pit. From the molten sulfur pit it is transferred to the molten sulfur storage tank and to the two (2) 3,000 tons per day sulfuric acid plants. The maximum permitted molten sulfur throughput rates are 1,974 tons per day and 720,510 tons per year.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The molten sulfur feed rate to the sulfuric acid plants shall exceed neither 1,974 tons per day (TPD), nor 720,510 tons per 12 consecutive month period.
[Construction permit AC53-270480, Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Note: The above maximum throughput rates are based upon the combined permitted sulfuric acid production capacity of 6,000 tons per day for the two sulfuric acid plants to which this molten sulfur handling system supplies sulfur (See Condition C.1).

Emission Limitations and Standards

D.2. Visible emissions from any emission point in the molten sulfur facility shall not exceed 20% opacity (six minute average).
[Rule 62.296.411(1)(g), F.A.C.]

D.3. For emission inventory and PSD purposes (these are not enforceable limits), the estimated maximum emissions from the sources in the molten sulfur storage and handling system are:

Pollutant	028 -- Storage Tank		029 -- Sulfur Pit	
	Maximum Emissions (lb/hr)	Total Emissions[1] (TPY)	Maximum Emissions (lb/hr)	Total Emissions[1] (TPY)
Sulfur particles emissions	1.57	6.87	0.73	3.22
PM_{10} emissions	3.34	14.65	1.57	6.87
Total particulates	3.79	16.61	1.78	7.79
TRS (as H_2S) emissions	1.66	7.23	1.57	6.89
SO_2	0.49	2.14	0.23	1.00
VOC emissions	4.72	20.68	2.19	9.58

[1]Based on an annual sulfur throughput of 720,510 tons.
[Title V Air Permit Application Additional Information dated May 15, 1998]

Test Methods and Procedures

D.4. The permittee shall test each vent of each identified Point ID (028, 029, 030, and 031) for visible emissions on or during the 120 day period prior to the expiration date of this permit.
[Rule 62-297.310(7)(a)3, F.A.C.].

D.5. Compliance with the visible emission limitation of Condition D.2 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C.
[Rules 62-297.310(4)(a)2, and 62-296.411(1)(j)1., F.A.C.]

D.6. Testing of emissions must be conducted while the source (emissions unit) is being filled at a rate which is representative of the maximum filling rate. To the extent possible, the filling rate for each source shall be specified in the test results. Failure to include the filling rates may invalidate the test and fail to provide reasonable assurance of compliance.
[Rule 62-4.070(3), F.A.C.].

Operating Practices

D.7. All molten sulfur transfer shall be through enclosed piping systems where feasible and practical. In user facilities, molten sulfur may be transferred by covered trench or a movable spout which is positioned over a receiving pit. Contact surfaces between stationary pipes shall seat effectively around the entire circumference to minimize spillage.
[Rule 62.296.411(1)(a), F.A.C.]

D.8. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or railcars shall be paved and curbed within 20 feet of the point of disconnection or transfer to contain any spilled molten sulfur, or shall be provided with non-corrosive drip pans or other secondary containment, positioned to collect spills, that are adequate to contain amounts of sulfur that may escape during routine disconnection, re-connection or operation of the piping system.
[Rule 62-296.411(1)(b), F.A.C.]

D.9. All spilled molten sulfur shall be collected and properly disposed of whenever the containment area is filled to one-half its containment capacity, or monthly, whichever is more frequent. Spills of molten sulfur outside of a containment area, or where subject to vehicular traffic, shall be collected and disposed of as soon as possible, but no later than 24 hours after the spill occurs. Drip pans or other secondary containment shall be cleaned as needed to prevent exceedance of capacity, but at least weekly.
[Rule 62-296.411(1)(d), F.A.C.]

D.10. All vent surfaces shall be cleaned monthly to remove captured particles.
[Rule 62-296.411(1)(e), F.A.C.]

D.11. Any change in the method of operation or equipment which will cause an increase in the actual emissions may be considered a modification and must be reported to the Southwest District Office of the Department for proper processing prior to implementing the change.
[Construction Permit AC53-169795, Rules 62-210.300 and 62-210.200(169), F.A.C.]

Recordkeeping and Reporting Requirements

D.12. The permittee shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur.
[Rule 62-296.411(1)(f), F.A.C.]

D.13. In order to document compliance with the requirements of Condition D.1, the permittee shall maintain the following records at the facility and make them available to the Department upon request:

a. Sulfur acid plant daily molten sulfur throughput (tons per day);
b. Sulfuric acid plant monthly total sulfur throughput rate (tons/month) and cumulative total for the most recent 12 consecutive month period (tons/yr).

[Rules 62-4.070(3) and 62-213.440(1)(b)2.b., F.A.C.]

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-032	Prilled MAP Plant (includes MAP/*DAP* Storage & Loadout)

The 60 TPH prilled MAP plant is based on the Swift prill tower process. In this process, diluted wet process phosphoric acid is reacted with ammonia vapor in a pipe reactor and sprayed into the top of the tower to produce MAP. Ambient air entering the bottom of the tower removes moisture in the MAP as they fall by gravity to the bottom of the tower. The gas in the tower is evacuated to a venturi scrubber. Product MAP is cooled in a cooler. The gas in the cooler is evacuated to a smaller venturi scrubber. The gas and liquid from both venturi scrubbers enter a cyclonic separator prior to being discharged to the atmosphere via a stack. A portion of the scrubber liquid is used to adjust the concentration of phosphoric acid in the day tank. Fresh water and/or cooling pond water is used to maintain scrubber water balance. The cooler discharges to a transfer system that carries the MAP to the *MAP/DAP* storage building.

From the storage building, *MAP/DAP* is loaded into railcars by a loadout system. Dust from the loadout system is controlled by a baghouse. *The storage and loadout system baghouse may be shut down only while handling granular MAP/DAP to which dust-suppressing oil has been applied in sufficient quantity.*

{Permitting note: These emissions units are regulated under Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards and Rule 62-296.403, F.A.C., Phosphate Processing and 40 CFR 63, Subpart BB, Phosphate Fertilizer Production. **The Part 40 CFR 63 Subparts A and AA take precedence over NSPS standards, but will not take precedence over BACT determinations. However these units are subject to all applicable NSPS standards if these units are out of compliance with the NESHAP. State Implementation Plan (SIP) rules (Rule 62-296.403, F.A.C) apply if these units are out of compliance with the NSPS standards or if there is no applicable NSPS standard when out of compliance with the NESHAP}**

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Capacity.

a. The production rate of the Prilled MAP Plant shall not exceed 40.9 tons of MAP product per hour, except as allowed by Condition E.1.b below.

b. To regain the original plant capacity of 60 tons of MAP product per hour, the permittee may conduct a performance test at a rate higher than 40.9 tons of MAP product per hour and up to 60 tons of MAP product per hour by notifying the Department at least 15 days prior to the special test. The plant may be operated at the higher rate for only seven consecutive days and then must resume operation at no higher than 40.9 tons of MAP product per hour. Upon written approval of the performance test by the Department, including a determination that the plant will be able to meet the limits of conditions E.2 through E.6, the plant will be authorized to operate at a rate up to and including the rate that was experienced during the performance test. In the process of regaining the originally intended capacity of 60 tons of MAP product per hour, the permittee shall not be required to

undergo another PSD review and BACT determination for PM/PM_{10} under Rule 62-212.400, F.A.C. or another BACT review for fluorides under Rule 62-296.403, F.A.C., unless the permittee submits an application to increase the plant's maximum operating capacity above 60 tons of MAP product per hour.

[Rules 62-4.160(2) & 62-210.200, F.A.C., Definitions - (PTE); Construction permit AC53-260190/PSD-FL-222]

Emission Limitations and Standards

E.2. Particulate matter $(PM)/PM_{10}$ emissions from the Prilled MAP Plant scrubber stack shall not exceed any of the following:

a. 0.4 pounds per ton of MAP product;
b. 16.4 pounds per hour;
c. 71.7 tons per year.

{Permitting Note: Emission limits based on 40.9 tons per hour of MAP product.} [Construction permit AC53-260190/PSD-FL-222]

E.3. Fluoride emissions from the Prilled MAP Plant scrubber stack shall not exceed any of the following:

a. 0.019 pounds per ton of P_2O_5 input;
b. 0.39 pounds per hour;
c. 1.7 tons per year.

{Permitting Note: Emission limits based on 20.5 tons per hour P_2O_5 input.} [Construction permit AC53-260190/PSD-FL-222]

E.4. Total fluoride emissions from the Prilled MAP and Granular MAP/DAP Plants shall not exceed 2.94 tons per consecutive 12-month period. (Effective as of the revision date for Permit No. 1050051-017-AV, as shown on page 2 of 3.)
[Construction permit 1050051-008-AC]

E.5. Visible emissions from the Prilled MAP Plant scrubber stack shall not exceed 15% opacity. [Construction permit AC53-260190/PSD-FL-222]

E.6. Visible emissions from the MAP/*DAP* Loadout baghouse shall not exceed 5% opacity. [Construction permit AC53-260190/PSD-FL-222]

E.7. There shall be less than 5% visible emissions to the ambient atmosphere from any point on the MAP/DAP storage building and load-out system when a dust-suppressing oil has been applied to granular product to control particulate emissions in lieu of operation of the baghouse emission-control device. (Effective as of the revision date for Permit No. 1050051-019-AV, as shown on page 2 of 3.)
[Rules 62-4.070(3) & 62-296.320(4)(c), F.A.C.; Construction permit 1050051-014-AC]

Test Methods and Procedures

E.8. The Prilled MAP Plant scrubber stack shall be tested for the following pollutants in each federal fiscal year (October 1-September 30).

a. total fluorides;
b. PM/PM_{10};
c. visible emissions.

[Rule 62-297.310(7)(a)4, F.A.C.; Construction Permit AC53-260190/PSD-FL-222]

E.9. The MAP/*DAP* Loadout baghouse shall be tested for visible emissions in each federal fiscal year. (The Department shall waive this test in each year that the permittee submits a statement that—since the last compliance test—(1) dust-suppressing oil has been applied at no less than the minimum rate established by Condition E.12, and (2) the baghouse system has not been used.) (Effective as of the revision date for Permit No. 1050051-019-AV, as shown on page 2 of 3.)
[Rules 62-297.310(7)(a)4 & (7)(c), F.A.C.; Construction Permits AC53-260190/PSD-FL-222 *and 1050051-014-AC*]

E.10. Compliance with the emission limitations of Conditions E.2 through E.6 shall be determined using EPA Methods 1, 2, 4, 5, 9 and 13A or 13B contained in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-297, F.A.C. The actual production rate shall be specified in each test report. Failure to include the actual production rate in the report may invalidate the test.
[Rule 62-297, F.A.C.; Construction Permit AC53-260190/PSD-FL-222]

E.11. The Department's Bureau of Air Regulation Office in Tallahassee and the Southwest District Office shall be notified in writing at least 15 days prior to any emission test.
[Rule 62-297.310, F.A.C.; Construction Permit AC53-260190/PSD-FL-222]

E.12. To insure that the MAP/DAP storage and loadout facility does not produce visible emissions while handling granular product when the baghouse is shutdown, product shall have been oiled at no less than the minimum rate identified in Table 2-1. The permittee shall conduct performance tests on all types of dust-suppressing oils that will be used to control generation of dust in the MAP/DAP storage and loadout system. A report of the results of these performance tests shall be submitted to the Department. For each oil tested, the report shall include at least the following information:

1. The specific type of dust-suppressing oil (include a MSDS sheet on this material, if available);
2. The point of application of the dust-suppressing oil, the minimum rate (gallons of oil per ton of product) at which it was applied, and a description of how the rate of application was controlled and measured;
3. A statement of the results of observation of visible emissions from the transfer and load-out building when handling product to which dust-suppressing oil had been applied at the minimum rate.

Should the permittee decide at some future time to use a dust-suppressing oil (1) for which no performance test has been submitted to the Department or (2) for which any of the conditions of application in Condition E.12, item no. 2, above, has been altered, then additional performance testing shall be conducted within 15 days of the change for the new oil and/or conditions. A report that contains Condition E.12., item nos. 1, 2, & 3, above, shall be submitted to the Department within 30 days of the testing. Table 2-1 may be revised upon request from the permittee and written approval from the Department. (Effective as of revision date for Permit No. 1050051-019-AV, as shown on page 2 of 3.)
[Rule 62-297.310(7)(c), F.A.C.; Construction Permit 1050051-014-AC]

E.13. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.
[Rule 62-210.650, F.A.C.]

E.14. The Prilled MAP Plant shall be subject to the following:

a. Excess emissions resulting from startup, shutdown or malfunction of any source 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 hour in any 24 hour period unless specifically authorized by the Department for longer duration.
b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
c. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.
d. In case of excess emissions resulting form malfunctions, each source shall notify the Department 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, F.A.C.; Construction Permit AC53-260190/PSD-FL-222]

Monitoring of Operations

E.15. In order to provide reasonable assurance that the pollution control system is operating properly, the permittee shall create and keep a record log of the scrubber operating parameters. The record log shall contain, at a minimum:

a. the volumetric liquid flow rate (gallons per minute),
b. the scrubber pressure drop (inches of water),
c. the date and time of the measurements, and
d. the name of the person responsible for performing the measurements.

A log entry shall be made at least once for every day that the MAP Plant operates.

{Permitting Note: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this Condition.}
[Rules 62-4.070(3), 62-4.160(14)(b), 62-4.160(14)(c), and 62-213.440(b)2.b., F.A.C.]

E.16. In order to provide reasonable assurance that the pollution control system is operating properly, the permittee shall create and keep a record log of the baghouse operating parameters. The record log shall contain, at a minimum:

b. the pressure drop (inches of water),
c. the date and time of the measurements, and
d. the name of the person responsible for performing the measurements.

A log entry shall be made at least once for every day of operation of the MAP/DAP Loadout System. If dust-suppressing oil was applied to product, then the lowest rate at which oil was applied shall be entered into the daily record log. (Effective as of the revision date for Permit No. 1050051-019-AV, as shown on page 2 of 3.)

{Permitting Note: Daily baghouse recordkeeping is required only on days that the load-out system conveys un-oiled or inadequately oiled product; and daily oiling recordkeeping is required only on days that dust-suppressing oil is applied to product.}

{Permitting Note: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this Condition.}
[Rules 62-210.650, 62-4.160(14)(b)&(c), and 62-213.440(b)2.b., F.A.C.; *Construction Permit 1050051-014-AC*]

Recordkeeping and Reporting Requirements

E.17. In order to comply with Condition E.1, the permittee shall maintain hourly records of the MAP production rate. [Rule 62-213.440(1), F.A.C.]

Compliance Assurance Monitoring

E.18. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Subsection F. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-033	Lime Storage Silo

The lime storage silo is used to store lime for wastewater treatment. Emissions created during the pneumatic filling of the silo by trucks are controlled by a Mikro-Pulsaire Bin-10 "B" Style baghouse having a total cloth filtration area of 106.0 square feet.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.700, F.A.C., RACT Particulate Matter.}

The following conditions apply to the emissions unit(s) listed above:

Recordkeeping and Reporting Requirements

F.1. Capacity. The maximum lime storage silo filling and transfer rate shall not exceed 25 tons per hour.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

F.2. Hours of Operations The hours of operation for this emissions unit shall not exceed 20 hours per year.
[Rule 62-210.200, F.A.C., Definitions - (PTE), Title V Air Permit Application dated June 13, 1996]

Emission Limitations and Standards

F.3. Visible emissions from the lime storage silo shall not be equal to or greater that 20% opacity.
[Rule 62-296.320(4)(b), F.A.C.]

F.4. The maximum permitted allowable emission rate of particulate matter for a process rate of 25.0 tons per hour is 13.87 pounds per hour as set by the Process Weight Table contained within Rule 62-296.320(4)(a), F.A.C. At lesser rates the allowable emission rates can be determined from the appropriate equation:

Where: E = Emission limit in pounds per hour, and
P = Process weight rate in tons per hour,
(i) $E = (3.59) P^{0.62}$, where P is less than or equal to 30 tons per hour, or
(ii) $E = (17.31) P^{0.16}$, where P is greater than 30 tons per hour.
[Rule 62-296.320(4)(a), F.A.C.]

Test Methods and Procedures

F.5. Test for the lime storage silo for visible emissions per Condition F.3 annually, during each federal fiscal year.
[Rule 62-297.310(7)(a)4., F.A.C.]

F.6. Test for particulate matter emissions per Condition F.4, on or during the 120 day period prior to the expiration date of this permit. The annual visible emissions test required per Condition F.3 shall be conducted concurrently with this particulate matter emissions test. (waived per Condition F.7)
[Rules 62-297.310(7)(a)3, F.A.C.]

F.7. Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because the lime storage silo is equipped with a baghouse emission control device, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% from this source's baghouse exhaust in lieu of a particulate stack test and a 20% opacity standard.
[Rule 62-297.620(4), F.A.C.]

F.8. Compliance with the particulate matter and visible emissions limitations shall be determined using EPA Methods 1, 2, 4, 5, and 9 contained in 40 CFR 60, Appendix A, adopted by reference in Rule 62-297, F.A.C. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. This period is expected to be the last minutes of silo loading when the silo approaches storage capacity. The visible emissions test shall be conducted for the normal duration of the silo loading operation.
[Rules 62-297.620(4), 62-297.310(4)(a) and 62-297.310(8), F.A.C.]

Operating Rate During Testing

F.9. All visible emissions tests and particulate matter emission tests shall be conducted while pneumatically loading the silo with lime material at a rate that is representative of the normal production silo loading rate. Each test report shall include a calculation indicating the actual silo loading rate during each test, the total amount of material loaded to the silo and the residual contents of the silo prior to each test. Testing at conditions that are not representative of normal operating conditions may invalidate the test or limit subsequent source operation.
[Rules 62-297.310(7), 62-297.310(8), and 62-4.070(3), F.A.C.]

Monitoring of Operations

F.10. In order to demonstrate compliance with Rule 62-210.650, the permittee shall record the pressure drop during each silo loading.
[Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

F.11. In order to document compliance with the rate limitations of Condition F.1, the permittee shall maintain records of the amount of material processed during each silo loading and the total hours of each silo loading.
[Rule 62-4.070(3), F.A.C.]

Subsection G. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-035	Phosphogypsum Stack

Phosphogypsum stack.

{Permitting note(s): This emissions unit is regulated under Rule 40 CFR 61 Subpart A and R (National Emission Standards for Hazardous Air Pollutants -- General Provisions; and National Emission Standards for Radon Emissions from Phosphogypsum Stacks.).}

The following conditions apply to the emissions unit(s) listed above:

G.1. The permittee shall comply with 40 CFR 61 Subpart A and R (National Emission Standards for Hazardous Air Pollutants -- General Provisions; and National Emission Standards for Radon Emissions from Phosphogypsum Stacks).

Subsection H. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-038	Granular MAP/DAP Plant

The granular MAP/DAP fertilizer plant may produce up to 50 tons per hour (TPH) of granular MAP and/or DAP fertilizer. It shares some process equipment and air-pollution control equipment with the existing prilled MAP plant. The plants will not be operated concurrently. When operated as the granular MAP/DAP plant, the facility shall comply with the conditions contained in Subsection H of this permit. (When operated as the prilled MAP plant, the facility shall comply with the conditions contained in Subsection E of this permit.)

The granulation equipment's emission sources include the following: reactor, granulator, natural gas fired dryer, product screens, storage bin, bucket elevators, conveyors, and grinding mills. Air-pollution control equipment includes a dryer, high-efficiency cyclone and a cooler's high-efficiency cyclone. Certain air-pollution control equipment used at the prilled MAP plan, such as the tower venturi, cooler venturi, and cyclonic separator, is also used to control emissions from the granular MAP/DAP plant.

Granular MAP and DAP are made by reacting anhydrous ammonia and phosphoric acid in a covered reaction tank with the further addition of ammonia and acid in a granulator. The granulated product is then dried in a rotary drier. The dried product is sized by screening, grinding of oversized and recycling of undersized. The properly sized product is conveyed to the storage building for eventual loadout. Granular fertilizer from this plant and from the Bartow facility may be stored in the existing storage building and loaded into railcars or trucks by the existing loadout system.

Emissions from the reactor and granulator are directed first to a venturi/cyclonic ammonia absorber (R-G ammonia absorber) to recover ammonia, then to the existing tower venturi. The R-G ammonia absorber also controls particulate matter emissions. Emissions from the rotary dryer and material handling equipment are controlled by the new dryer cyclone and then the tower venturi. Emissions from the cooler are controlled by the new cooler cyclone and the cooler venturi. The tower venturi and cooler venturi are ducted to the cyclonic separator. The cyclonic separator contains a chevron-type mist eliminator to further reduce entrained scrubber liquors prior to exhaust to the atmosphere. Control equipment for the process equipment is identified in the following table.

Granular MAP/DAP Emission Sources & Associated Control Equipment

Process Emission Source/Identifier*	Control Equipment
MAP/DAP Reactor	Tower venturi (shared), cyclonic separator (shared)
MAP/DAP Granulator	
Dryer	Dryer cyclone, tower venturi (shared), cyclonic separator (shared)
Screen Feed Elevator	
Product Screen A	
Product Screen B	
Product Bin	
Oversize Mill A	
Oversize Mill B	
Product Feeder	
Recycle Conveyor	
Recycle Elevator	
Product Transfer Conveyor	
Fines Reclaim Conveyor	Covered conveyor
Fines Reclaim Hopper	Enclosed by storage building
Cooler (shared)	Cooler cyclone, cooler venturi (shared), cyclonic separator (shared)
Product Elevator (shared)	Enclosed
Storage Transfer Conveyor (shared)	Covered conveyor

Notes:
1. Emissions from the reactor and granulator are ducted to the R-G ammonia absorber. Its primary purpose is to recover ammonia, so it is not considered control equipment. However, it controls PM/PM_{10} emissions and could be a source of fluoride emissions.
2. The tower venturi is labeled "large venturi" in the 6/22/99 process flow diagram.
3. The cooler venturi is labeled "small venturi" in the 6/22/99 process flow diagram.
4. Equipment not noted as "shared"(with prilled plant) is used only by granular plant.

*from process flow diagram received 6/22/99.

Rule Applicability Notes:

- The granular DAP Method of Operation is subject to 40 CFR 60 Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants and Rule 62-296.403(f), Phosphate Processing.
- The granular MAP Method of Operation is subject to Rule 62-296.403(i), F.A.C., Phosphate Processing. This rule requires Best Available Control Technology (BACT) to control fluoride emissions during granular MAP production.
- 40 CFR 63, Subpart BB, Phosphate Fertilizer Production. **The Part 40 CFR 63 Subparts A and BB take precedence, however these units are subject to all applicable State Implementation Plan (SIP) rules if these units are out of compliance with the NESHAP**
- The facility has requested that this project be permitted as a non-PSD source. Therefore, this permit contains limitations to ensure that this modification does not exceed PSD significant increase levels.

Subsection H1. The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit Parameters

H.1. The dryer shall be fired with natural gas only.
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.; Construction permit 1050051-008-AC]

H.2. The Granular MAP/DAP Plant is allowed to operate continuously, i.e., 8,760 hours per year.
[Rule 62-210.200(PTE), F.A.C.; Construction permit 1050051-008-AC]

H.3. The P_2O_5 process input rate shall not exceed 26.5 TPH (daily average basis) and 158, 920 tons per consecutive 12-month period. [Construction permit 1050051-008-AC]

H.4. the production rates of granular MAP/DAP shall not exceed 50 TPH (daily average basis) and 300,000 tons per consecutive 12-month period for the total of both products. If any prilled MAP is produced during the same 12-month period, the above annual limitation is presented by the following equation:

$$G = 300{,}000 - P/1.9$$

where:

G = granular MAP/DAP production limit (tons per consecutive, 12-month period)
P = production of prilled MAP (tons per consecutive, 12-month period)

[Rule 62-210.200(PTE), F.A.C. ; Construction permit 1050051-008-AC]

Note: The production of prilled MAP is currently limited to 358,284 tons per consecutive 12-month period (i.e., 40.9 TPH x 8760 hrs/yr) in Permit No. PSD-FL-222. If the prilled MAP production limit is increased, the above condition must be modified to ensure that the potential fluoride emissions from the production of prilled MAP and granular MAP/DAP do not exceed 2.94 tons per consecutive 12-month period.

H.5. Covers and enclosures shall be maintained for the fines-reclaim conveyor, product elevator, and storage transfer conveyor.
[Rule 62-296.320(4)(c)2, F.A.C.; Construction permit 1050051-008-AC]

Emission Limitations

H.6. Total fluoride emissions from the Granular MAP/DAP Plant shall not exceed 0.98 lb/hr, 2.94 tons per consecutive 12-month period, and 0.037 lb F/ton of P_2O_5 input.
[Construction permit 1050051-008-AC; BACT Determination, dated 9/28/99]
Note: This limitation is more stringent than that contained in 40 CFR, Subpart V.

H.7. Total fluoride emissions from the Granular MAP/DAP Plant and the Prilled MAP Plant combined shall not exceed 2.94 tons per consecutive 12-month period.
[Rule 62-210.200 (PTE), F.A.C.; Construction permit 1050051-008-AC]
Note: Permit No. PSD-FL-222 limits annual total fluoride emissions to 1.7 tons from the prilled MAP plant.

H.8. PM/PM_{10} emissions from the Granular MAP/DAP Plant shall not exceed 8.38 lb/hr, 25.1 tons per consecutive 12-month period, and 0.168 lb PM/ton of product.
[Rules 62-210.200 (PTE) & 62-212.400, F.A.C.; Construction permit 1050051-008-AC]

H.9. Visible emissions from the cyclonic separator stack shall not exceed 15% opacity.
[Requested in permit application dated 5/17/99; Construction permit 1050051-008-AC]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

H.10. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60 Subpart A]

Monitoring of Operations

H.11. The permittee shall install, calibrate, maintain, and operate a flow-monitoring device that can be used to determine the mass flow of phosphorus-bearing feed material to the process. The flow-monitoring device shall have an accuracy of ±5 percent over its operating range. [40 CFR 60.223(a); Rule 62-204.800, F.A.C.]

H.12. The permittee shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate (TPH) of phosphorus-bearing feed using a flow monitoring device meeting the requirements of Specific Condition No. 11 and then by proceeding according to the following procedure:
The equivalent P_2O_5 feed rate (P) shall be computed for each operating day using the equation:

$$P = (Mp) \times (Rp)$$

where: Mp = total mass flow rate of phosphorus-bearing feed (TPH)
Rp = P_2O_5 content, decimal fraction

The monitoring device required in Specific Condition No. 11 shall be used to determine total mass flow rate of the phosphorus-bearing feed. An approved method listed in 40 CFR 63.606(c)(3)(ii) shall be used to determine the P_2O_5 content of the feed.
[40 CFR 60.223(b); Rules 62-204.800 & 62-4.070(3), F.A.C.]

H.13. The permittee shall install, calibrate, maintain, and operate monitoring devices that continuously measure and permanently record the pressure drop separately across the tower and cooler venturi scrubbers. Each monitoring device shall have an accuracy of ±5 percent over its operating range. [40 CFR 60.223(c); Rule 62-204.800, F.A.C.]

H.14. The permittee shall monitor and record the pressure drop of the R-G ammonia absorber at least once per 8-hour operating shift.
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.15. The permittee shall install, calibrate, maintain, and operate monitoring devices that continuously measure the liquid flowrate for the R-G ammonia absorber, tower venturi, and cooler venturi. The flowrates shall be recorded at least once per 8-hour operating shift. [Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.16. The permittee shall determine and record the scrubbing medium nitrogen to phosphorus (N:P) ratio for each of the following, via grab or composite sample, at least once per operating day: R-G ammonia absorber and final scrubbing system (i.e., tower venturi, cooler centuri, and cyclonic separator).
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.17. Recordkeeping for Specific Condition Nos. 14, 15, and 16 shall include the date and time of the measurements and the name of the person responsible for recording the measurements. **Note:** This does not apply to continuous recording devices.
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.18. In order to provide reasonable assurance that the granular MAP/DAP plant's air-pollution control equipment is functioning properly during plant operation, the following set of scrubber operating parameters shall be maintained at a minimum of 90% of the values measured and recorded during any single, satisfactory compliance test conducted since the initial compliance test on February 27, 2001, and conducted while operating at a minimum of 90% of the maximum allowed operation rate:

(a) liquid flowrate and pressure drop for the R-G ammonia absorber, tower venturi, and cooler venturi
(b) N:P ratio for the R-G ammonia scrubber and final scrubber system.

Satisfactory compliance tests conducted below 90% of the maximum allowed operating rate will establish a set of new minimum scrubber parameter values for that lower operating rate (this does not exclude the use of parameter values previously established for higher operating rates).

A value outside of the acceptable scrubber operating parameter ranges does not necessarily constitute a violation, but rather establishes a requirement for an additional compliance test or tests. Within 30 days of the operation of a pollution control device lower than 90% of the minimum acceptable numerical control parameter determined during satisfactory compliance tests as detailed above, the permittee shall conduct a compliance test for fluoride and PM/PM_{10} (except in the case of the N:P ratio, for which only a fluoride test is required) with the pollution control device operating at no higher than 110% of the lower value at which it operated, in order to demonstrate compliance.
[Rules 62-4.070(3) & 62-210.650, F.A.C.; Construction permit 1050051-008-AC]

Compliance Testing Requirements

H.19. The cyclonic separator stack shall be tested for fluorides and visible emissions each federal fiscal year. In addition, in the federal fiscal year 2005 (the year prior to the five-year anniversary of the initial PM/PM_{10} compliance test), conduct a PM/PM_{10} compliance test on the cyclonic separator stack.
[Rule 62-297.310(7)(a)3 & 4, F.A.C; Construction permit 1050051-008-AC]

H.20. Test Methods

(a) Fluoride emissions testing shall be conducted in accordance with EPA Method 13A or 13B or other methods approved by the Department as an Alternate Procedure (such as ASP No. 95-H-01) in accordance with Rule 62-297.620, F.A.C. An approved method listed in 40 CFR 63.606(c)(3)(ii) shall be used to determine the P_2O_5 content of the phosphate feed.

(b) PM/PM_{10} emissions testing shall be conducted in accordance with EPA Method 5 or other methods approved by the Department as an Alternate Procedure in accordance with Rule 62-297.620, F.A.C. The sample volume for each run shall be at least 30 dscf.

(c) When both particulate matter and visible emissions testing are required, the tests shall be conducted concurrently.

(d) Visible emissions observations shall be conducted in accordance with EPA Method 9 and shall be a minimum of 30 minutes.

(e) The minimum requirements for stationary point source emission test procedures shall be in accordance with Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A.

[Rules 62-296.320(4)(a)3(i), -297.310(4)(a)2, -4.070(3) & -297.401,F.A.C.; 40CFR60.224]

H.21. Test Report. The test report shall provide, at minimum, the information required in Rule 62-297.310(8), F.A.C. In addition, the report shall provide the following information for each test run:

- MAP/DAP production rate (TPH)
- P_2O_5 input rate (TPH)
- Liquid flowrate (GPM) and pressure drop (inches H_20) for the R-G ammonia absorber, tower venturi, and cooler venturi
- Makeup liquid of the final scrubbing system
- N/P ratio for the R-G ammonia absorber and the final scrubbing system

[Rule 62-297.310(8), F.A.C.; Construction permit 1050051-008-AC]

Reporting And Recordkeeping Requirements

H.22. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7; Rule 62-204.800, F.A.C.]

H.23. A recordkeeping log shall be established and maintained to document compliance with Condition Nos. 3, 4, and 12. The daily logs shall be updated and completed by the end of the operating day. The monthly logs shall be updated and completed by the 15th day of the following month. The logs shall include, at a minimum, the following:

Daily (each operating day)

(a) date
(b) hours of operation
(c) the calculated P_2O_5 feed rate (TPH, daily average basis)
(d) the calculated MAP/DAP production rate (TPH, daily average basis)

Monthly

(e) month
(f) monthly P_2O_5 input and production of granular MAP/DAP and prilled MAP (tons)

(g) P_2O_5 input and production of granular MAP/DAP and prilled MAP for the most recent, consecutive, 12-month period (tons)
(h) if prilled MAP was produced during the most recent, consecutive, 12-month period, calculate the reduced production limit for granular MAP/DAP in accordance with Specific Condition No. 4 (tons per consecutive 12-month period)

These records shall be retained on file at the facility for at least five years and shall be made available to the Department upon request.
[Rule 62-213.440(1)(b), F.A.C.; 40 CFR 60.223(b); Construction permit 1050051-008-AC]

PSD Applicability

H.24. Based on the limitations contained in construction permit 1050051-008-AC (and contained in Subsection H of this Title V permit), the construction of the granular MAP/DAP plant and modification of the existing prilled MAP plant at an existing PSD major facility was not considered a significant modification subject to PSD requirements on the basis that the net emissions increases associated with the modification were determined to be not significant (ref. Table 2, Rule 62-212.400, F.A.C.). Should the permittee request relaxation of any emission or operational limitations in this permit that would affect the potential to emit of this facility, the Department will evaluate the applicability of the PSD requirements of Chapter 62-212, F.A.C., as if the modifications allowed by construction permit 1050051-008-AC had not yet taken place.
[Rule 62-212.400(2)(g), F.A.C.; Construction permit 1050051-008-AC]

Compliance Assurance Monitoring

H.25. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Subsection H2. The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit Parameters

H.0. All of the terms and conditions of permit number 1050051-015-AC/PSD-FL-321 are a part of this permit (see attachment 1050051-015-AC/PSD-FL-321).

Operation of the emissions unit(s) listed above beyond the time frames established by permit number 1050051-015-AC/PSD-FL-321 is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the emissions unit(s) was completed in accordance with permit number 1050051-015-AC/PSD-FL-321 and 2) the unit has been tested and compliance with the terms and conditions contained within permit number 1050051-015-AC/PSD-FL-321 has properly been demonstrated.
[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C.]
Note: Subsection H1 can be removed once Subsection H2 is applicable.

H.1. The dryer shall be fired with natural gas only. The natural gas firing rate in the dryer shall not exceed 30 million BTU per hour
[Rules 62-212.400, 62-4.160(2) and 62-213.440(1), F.A.C.; Construction permit 1050051-015-AC; PSD-FL-321]

H.2. The Granular MAP/DAP Plant is allowed to operate continuously, i.e., 8,760 hours per year.
[Rule 62-210.200(PTE), F.A.C.; Construction permit 1050051-015-AC; PSD-FL-321]

H.3. The production rate shall not exceed 60 tons of MAP per hour (31.8 tons of P_2O_5 feed per hour) or 60 tons of DAP per hour (28.2 tons of P_2O_5 feed per hour).
[Construction permit 1050051-015-AC; PSD-FL-321]

H.4. The maximum permitted loadout rate is 150 tons product per hour, on a daily basis.
[Rule 62-210.200(PTE), F.A.C.; Construction permit 1050051-015-AC; PSD-FL-321]

H.5. Covers and enclosures shall be maintained for the fines-reclaim conveyor, product elevator, and storage transfer conveyor.
[Rule 62-296.320(4)(c)2, F.A.C.; Construction permit 1050051-008-AC]

Emission Limitations

H.6. Total fluoride emissions during MAP production shall not exceed 1.18 pounds per hour and 5.2 tons per year. Total fluoride emissions during DAP production shall not exceed 1.04 pounds per hour and 4.6 tons per year.
[Construction permit 1050051-015-AC; PSD-FL-321]
Note: This limitation is more stringent than that contained in 40 CFR, Subpart V.

H.7. Particulate matter emissions during MAP/DAP production shall not exceed 10.2 pounds per hour and 44.7 tons per year.
[Rules 62-210.200 (PTE) & 62-212.400, F.A.C.; Construction permit 1050051-015-AC; PSD-FL-321]

H.8. Visible emissions from the cyclonic separator stack shall not exceed 15% opacity. Visible emissions from other scrubber stacks shall not exceed 20% opacity. Visible emissions from the Loadout stack shall not exceed 5% opacity.
[Requested in permit application dated 5/17/99; Construction permit 1050051-008-AC and 1050051-015-AC; PSD-FL-321]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}

H.9. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60 Subpart A]

Monitoring of Operations

H.10. The permittee shall install, calibrate, maintain, and operate a flow-monitoring device that can be used to determine the mass flow of phosphorus-bearing feed material to the process. The flow-monitoring device shall have an accuracy of ±5 percent over its operating range. [40 CFR 60.223(a); Rule 62-204.800, F.A.C.]

H.11. The permittee shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate (TPH) of phosphorus-bearing feed using a flow monitoring device meeting the requirements of Specific Condition No. 11 and then by proceeding according to the following procedure:
The equivalent P_2O_5 feed rate (P) shall be computed for each operating day using the equation:

$$P = (Mp) \times (Rp)$$

where: Mp = total mass flow rate of phosphorus-bearing feed (TPH)
Rp = P_2O_5 content, decimal fraction

The monitoring device required in Specific Condition No. 11 shall be used to determine total mass flow rate of the phosphorus-bearing feed. An approved method listed in 40 CFR 63.606(c)(3)(ii) shall be used to determine the P_2O_5 content of the feed.
[40 CFR 60.223(b); Rules 62-204.800 & 62-4.070(3), F.A.C.]

H.12. The permittee shall install, calibrate, maintain, and operate monitoring devices that continuously measure and permanently record the pressure drop separately across the tower and cooler venturi scrubbers. Each monitoring device shall have an accuracy of ±5 percent over its operating range. [40 CFR 60.223(c); Rule 62-204.800, F.A.C.]

H.13. The permittee shall monitor and record the pressure drop of the R-G ammonia absorber at least once per 8-hour operating shift.
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.14. The permittee shall install, calibrate, maintain, and operate monitoring devices that continuously measure the liquid flowrate for the R-G ammonia absorber, tower venturi, and cooler venturi. The flowrates shall be recorded at least once per 8-hour operating shift. [Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.15. The permittee shall determine and record the scrubbing medium nitrogen to phosphorus (N:P) ratio for each of the following, via grab or composite sample, at least once per operating day: R-G ammonia absorber and final scrubbing system (i.e., tower venturi, cooler venturi, and cyclonic separator).
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.16. Recordkeeping for Specific Condition Nos. 13, 14, and 15 shall include the date and time of the measurements and the name of the person responsible for recording the measurements. **Note:** This does not apply to continuous recording devices.
[Rule 62-213.440(1)(b), F.A.C.; Construction permit 1050051-008-AC]

H.17. In order to provide reasonable assurance that the granular MAP/DAP plant's air-pollution control equipment is functioning properly during plant operation, the following set of scrubber operating parameters shall be maintained at a minimum of 90% of the values measured and recorded during any single, satisfactory compliance test conducted since the initial compliance test on February 27, 2001, and conducted while operating at a minimum of 90% of the maximum allowed operation rate:

(c) liquid flowrate and pressure drop for the R-G ammonia absorber, tower venturi, and cooler venturi
(d) N:P ratio for the R-G ammonia scrubber and final scrubber system.

Satisfactory compliance tests conducted below 90% of the maximum allowed operating rate will establish a set of new minimum scrubber parameter values for that lower operating rate (this does not exclude the use of parameter values previously established for higher operating rates).

A value outside of the acceptable scrubber operating parameter ranges does not necessarily constitute a violation, but rather establishes a requirement for an additional compliance test or tests. Within 30 days of the operation of a pollution control device lower than 90% of the minimum acceptable numerical control parameter determined during satisfactory compliance tests as detailed above, the permittee shall conduct a compliance test for fluoride and PM/PM_{10} (except in the case of the N:P ratio, for which only a fluoride test is required) with the pollution control device operating at no higher than 110% of the lower value at which it operated, in order to demonstrate compliance.
[Rules 62-4.070(3) & 62-210.650, F.A.C.; Construction permit 1050051-008-AC]

Compliance Testing Requirements

H.18. The cyclonic separator stack shall be tested for fluorides and visible emissions each federal fiscal year. In addition, in the federal fiscal year 2005 (the year prior to the five-year anniversary of the initial PM/PM_{10} compliance test), conduct a PM/PM_{10} compliance test on the cyclonic separator stack.
[Rule 62-297.310(7)(a)3 & 4, F.A.C; Construction permit 1050051-008-AC]

H.19. Test Methods

(a) Fluoride emissions testing shall be conducted in accordance with EPA Method 13A or 13B or other methods approved by the Department as an Alternate Procedure (such as ASP No. 95-H-01) in accordance with Rule 62-297.620, F.A.C. An approved method listed in 40 CFR 63.606(c)(3)(ii) shall be used to determine the P_2O_5 content of the phosphate feed.

(b) PM/PM_{10} emissions testing shall be conducted in accordance with EPA Method 5 or other methods approved by the Department as an Alternate Procedure in accordance with Rule 62-297.620, F.A.C. The sample volume for each run shall be at least 30 dscf.

(c) When both particulate matter and visible emissions testing are required, the tests shall be conducted concurrently.

(d) Visible emissions observations shall be conducted in accordance with EPA Method 9 and shall be a minimum of 30 minutes.

(e) The minimum requirements for stationary point source emission test procedures shall be in accordance with Chapter 62-297, F.A.C. and 40 CFR 60 Appendix A.

[Rules 62-296.320(4)(a)3(i), -297.310(4)(a)2, -4.070(3) & -297.401,F.A.C.; 40CFR60.224]

H.20. Test Report. The test report shall provide, at minimum, the information required in Rule 62-297.310(8), F.A.C. In addition, the report shall provide the following information for each test run:

- MAP/DAP production rate (TPH)
- P_2O_5 input rate (TPH)
- Liquid flowrate (GPM) and pressure drop (inches H_20) for the R-G ammonia absorber, tower venturi, and cooler venturi
- Makeup liquid of the final scrubbing system
- N/P ratio for the R-G ammonia absorber and the final scrubbing system

[Rule 62-297.310(8), F.A.C.; Construction permit 1050051-008-AC]

Reporting And Recordkeeping Requirements

H.21. Maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7; Rule 62-204.800, F.A.C.]

H.22. A recordkeeping log shall be established and maintained to document compliance with Condition Nos. 3, 4, and 12. The daily logs shall be updated and completed by the end of the operating day. The monthly logs shall be updated and completed by the 15th day of the following month. The logs shall include, at a minimum, the following:

Daily (each operating day)

(a) date
(b) hours of operation
(c) the calculated P_2O_5 feed rate (TPH, daily average basis)
(d) the calculated MAP/DAP production rate (TPH, daily average basis)

Monthly

(e) month
(f) monthly P_2O_5 input and production of granular MAP/DAP and prilled MAP (tons)

(g) P_2O_5 input and production of granular MAP/DAP and prilled MAP for the most recent, consecutive, 12-month period (tons)
(h) if prilled MAP was produced during the most recent, consecutive, 12-month period, calculate the reduced production limit for granular MAP/DAP in accordance with Specific Condition No. 4 (tons per consecutive 12-month period)

These records shall be retained on file at the facility for at least five years and shall be made available to the Department upon request.
[Rule 62-213.440(1)(b), F.A.C.; 40 CFR 60.223(b); Construction permit 1050051-008-AC]

Compliance Assurance Monitoring

H.23. This emissions unit is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.
2. The ports shall be capable of being sealed when not in use.
3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.

2. Walkways over free-fall areas shall be equipped with safety rails and toeboards.

(f) Electrical Power.

1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.

2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

(g) Sampling Equipment Support.

1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.

a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.

b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.

c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.

2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.

3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

Permit Reference: **1050051-019-AV**

FIGURE 1--SUMMARY REPORT-- GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

Pollutant *(Circle One)*: SO_2 NO_X TRS H_2S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period [1]: _____

Emission data summary [1]	**CMS performance summary** [1]
1. Duration of excess emissions in reporting period due to:	1. CMS downtime in reporting period due to:
a. Startup/shutdown..... ____	a. Monitor equipment malfunctions ..... ____
b. Control equipment problems ..... ____	b. Non-Monitor equipment malfunctions ____
c. Process problems ..... ____	c. Quality assurance calibration ..... ____
d. Other known causes..... ____	d. Other known causes ..... ____
e. Unknown causes ..... ____	e. Unknown causes..... ____
2. Total duration of excess emissions ..... ____	2. Total CMS Downtime ..... ____
3. Total duration of excess emissions x (100) / [Total source operating time] ____ %[2]	3. [Total CMS Downtime] x (100) / [Total source operating time] ..... ____ %[2]

(footnotes on next page)

[1] For opacity, record all times in minutes. For gases, record all times in hours.

[2] For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 60.7(c) shall be submitted.

Note: On a separate page, describe any changes since last quarter in CMS, process or controls.

I certify that the information contained in this report is true, accurate, and complete.

Name: _____

Signature: _____ *Date*: _____

Title: _____

[electronic name: figure1.doc]

Table 1-1, Summary of Air Pollutant Standards and Terms

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-005 Phosphoric Acid Plant A-Train
-020 Phosphoric Acid Plant B-Train
-021 Phosphoric Acid Plant Tank Farm
-006 Auxiliary Boiler

				Allowable Emissions			Equivalent Emissions*		Regulatory	See Permit
E.U. ID No.	Pollutant Name	Fuel(s)	Hours/Yr	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-005, 020, 021	F (Fluoride)		7,968	0.02 lbs/ton of P_2O_5, 0.88lb/hr 21.1 lbs/day, 3.5 tons/yr	0.88	3.5	0.88	3.5	AC53-103830, AC53-103831, 62-204.800(7)(b)25,F.A.C., 40 CFR 60.202(a)	III. A.3.
	VE		N/A	20% opacity	N/A	N/A	N/A	N/A	62-296.320(4)(b), F.A.C.	III. A.4.
-006	VE	No. 2 Oil/ Gas	N/A	20% opacity except 27% for 6 min/hr	N/A	N/A	N/A	N/A	62-296.406(1), F.A.C., BACT Determination 11/10/80	III. B.4.
	SO_2	Oil	840.0	0.5% Sulfur by weight,			26	11.0	AC53-33822/BACT	III. B.3.
				0.51 lb/MMBtu heat input			51	21.4	Determination 11/10/80.	III. B.5.
	PM		8,760	0.3 lb/MMBtu heat input			20	87.6	BACT Determination 11/10/80	III. B.5.
	NO_x		8,760	0.2 lb/MMBtu heat input			30	131.4	BACT Determination 11/10/80	III. B.5.

Notes: *The "Equivalent Emissions" listed are for information purposes only.
N/A: Not Applicable EBA: Established by Applicant

Table 1-1, Summary of Air Pollutant Standards and Terms

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
-016	Sulfuric Acid Plant #1
-017	Sulfuric Acid Plant #1

				Allowable Emissions			Equivalent Emissions*		Regulatory	See Permit
E.U. ID No.	Pollutant Name	Fuel(s)	Hours/Yr	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-016, 017	VE		N/A	10% opacity	N/A	N/A	N/A	N/A	62-204.800(7)(b)10,F.A.C., 40 CFR 60.83(a)(2), BACT Determination 8/23/85, AC53-081664, AC53-103829	III.C.2.
	SO_2		8,760	4.0 lbs/ton of 100% acid produced, 500.0 lbs/hr, and 2190 TPY	500.0	2190	500.0	2190	62-204.800(7)(b)10,F.A.C., AC53-081664, AC53-103829 40 CFR 60.82(a), BACT Determination 8/23/85.	III. C.3.
	H_2SO_4 Acid Mist		8,760	0.15 lbs/ton of 100% acid produced, 18.8 lbs/hr, and 82.3 TPY	18.8	82.3	18.8	82.3	62-204.800(7)(b)10,F.A.C., AC53-081664, AC53-103829 40 CFR 60.83(a)(1), BACT Determination 8/23/85.	III. C.4.
	NO_x		8,760	18 ppm or 73.6 TPY		73.6		73.6	AC53-081664, AC-103829	III. C.5.

Notes: *The "Equivalent Emissions" listed are for information purposes only.
N/A: Not Applicable EBA: Established By Applicant

Table 1-1, Summary of Air Pollutant Standards and Terms

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
-028	Molten Sulfur System -- Sulfur Tank
-029	Molten Sulfur System -- Sulfur Pit
-030	Molten Sulfur System -- Sulfur Rail Unloading
-031	Molten Sulfur System -- Sulfur Truck Unloading
-032	Prilled MAP Plant (includes MAP/*DAP* Storage & Loadout)

				Allowable Emissions			Equivalent Emissions*		Regulatory	See Permit
E.U. ID No.	Pollutant Name	Fuel(s)	Hours/Yr	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-028, 029 030, 031	VE		N/A	20% opacity	N/A	N/A	N/A	N/A	62-296.411(1)(g), F.A.C.	III. D.2.
-032	PM		8,760	0.4 lb/ton MAP, 16.41 lbs/hr, 71.7 TPY	16.41	71.7	16.41	71.7	AC53-260190/PSD-FL-222	III. E.2.
	FL		8,760	0.019 lbs/ton of P_2O_5, 0.39 lbs/hr, 1.7 TPY	0.39	1.7	0.39	1.7	AC53-260190/PSD-FL-222	III. E.3.
	VE (scrubber)		N/A	15% opacity	N/A	N/A	N/A	N/A	AC53-260190/PSD-FL-222	III. E.5.
	VE (baghouse)		N/A	5% opacity	N/A	N/A	N/A	N/A	AC53-260190/PSD-FL-222	III. E.6.
	VE (storage/load-out building)		*N/A*	*<5% opacity (when handling oiled, granular product)*	*N/A*	*N/A*	*N/A*	*N/A*	*1050051-014-AC*	*III. E.7*

Notes: *The "Equivalent Emissions" listed are for information purposes only. **Conditions H.4 and H.7 establish total (prilled and granular plants) production and emission limits that may affect the prilled plant's operation.

N/A: Not Applicable EBA: Established By Applicant

Table 1-1, Summary of Air Pollutant Standards and Terms

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience purposes only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-033 Lime Silo
-038 Granular MAP/DAP Plant

				Allowable Emissions			Equivalent Emissions*		Regulatory	See Permit
E.U. ID No.	Pollutant Name	Fuel(s)	Hours/Yr	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Citation(s)	Condition(s)
-033	PM		8,760	13.87 lbs/hr, process weight table	13.87		13.87	60.75	62-296.320(4)(a), F.A.C.	III. F.4.
	VE		N/A	20% (5% opacity in lieu of stack test)	N/A	N/A	N/A	N/A	62-296.320(4)(b), F.A.C.	III. F.3. & F.7.
-038	PM		8,760	0.168 lb/ton, 8.38 lbs/hr, 25.1 TPY	8.38	25.1	8.38	25.1	1050051-008-AC	III. H.8
	FL**		8,760	0.037 lbs/ton of P_2O_5, 0.98 lbs/hr, 2.94 TPY	0.98	2.94	0.98	2.94	1050051-008-AC , BACT Determination dated 9/28/99	III. H.6
	VE (cyclonic sep)		N/A	15% opacity	N/A	N/A	N/A	N/A	1050051-008-AC	III. H.9

Notes: *The "Equivalent Emissions" listed are for information purposes only. **Conditions H.4 and H.7 establish total (prilled and granular plants) production and emission limits that may affect the granular plant's operation.
N/A: Not Applicable EBA: Established By Applicant

Table 2-1, Summary of Compliance Requirements

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-005 Phosphoric Acid Plant A-Train
-006 Auxiliary Boiler
-020 Phosphoric Acid Plant B-Train
-016 Sulfuric Acid Plant #1
-021 Phosphoric Acid Plant Tank Farm
-017 Sulfuric Acid Plant #2

E.U. ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See Permit Condition(s)
-005, -020, 021	F (Fluoride)		13A or 13B	annual	29-November	1 hour		III. A.5. & A.6.
	VE		9	annual	29-November	30 minutes		III. A.5. & A.6.
	Pressure drop						Yes	III. A.8, A.10 & A.13.
	Water flow rate							III. A.8 & A.13.
	Mass flow							III. A.9, A.11 & A.13.
-006	VE	oil	DEP 9	annual	18-May	1 hour		III. B.6. & B.7.
	VE	gas	DEP 9	five years	6 months prior	1 hour		III. B.6, B.7 & B.9.
					to exp. date	1 hour		
	SO_2	No. 2	fuel analysis,	annual	18-May			III. B.6. & B.8.
		Fuel Oil	and sampling					
-016, 017	VE		9	annual	12-November	1 hour		III. C.6. & C.8.
	SO_2		8	annual	12-November	1 hour	Yes	III. C.6., C.7., & C.12.
	H_2SO_4 acid mist		8	annual	12-November	1 hour		III. C.6. & C.8.
	NO_x		7 or 7E	five years	120 days prior	1 hour		III. C.7. & C.8.
					to exp. date			

Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.
**CMS [=] continuous monitoring system

Condition A.7:

Pollution Control Equipment	Parameters	Minimum Limitations	Maximum Limitations
A-Train Venturi Scrubber	Liquid Flow-rate / Gas Pressure-Drop	64 GPM / 11.5 "H_2O	283 GPM / 19.4 "H_2O
B-Train Venturi Scrubber	Liquid Flow-rate / Gas Pressure-Drop	50 GPM / 10.5 "H_2O	283 GPM / 19.4 "H_2O
Tank Farm Venturi Scrubber	Liquid Flow-rate / Gas Pressure-Drop	91.8 GPM / 8.4 "H_2O	329 GPM / 18.3 " H_2O

Table 2-1, Summary of Compliance Requirements

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-028 Molten Sulfur System -- Sulfur Tank
-029 Molten Sulfur System -- Sulfur Pit
-030 Molten Sulfur System -- Sulfur Rail Unloading
-031 Molten Sulfur System -- Sulfur Truck Unloading
-032 Prilled MAP Plant (includes MAP/*DAP* Storage & Loadout)

E.U. ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See Permit Condition(s)
-028, 029, 030, 031	VE		DEP Method 9	five years	120 days prior to exp. date	30 minutes		III. D.4., D.5., & D.6.
-032	PM		5	annual	30-December	1 hour		III. E.8. & E.10.
	F (Fluoride)		13A or 13B	annual	30-December	1 hour		III. E.8. & E.10.
	VE		9	annual	30-December	30 minutes		III. E.8., E.9, & E.10.
	Pressure drop							III. E.16. & E.17.
	Water flow rate							III. E.16.

Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310(7)(a)4, F.A.C.
**CMS [=] continuous monitoring system

Condition E.12:

Pollution Control Equipment	Dust-Suppressing Oil	Minimum Application Rate	Point of Application	Method of Measurement
MAP/DAP Storage & Loadout Unit—Product Oiling	Dustrol 3650	~~0.37~~ 0.64 gallons per ton of product	Cooler's discharge end	Ratio controller/ automatic valve

Table 2-1, Summary of Compliance Requirements

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No.: 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

This table summarizes information for convenience only. It does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

-033 Lime Silo
-038 Granular MAP/DAP Plant

E.U. ID No.	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See Permit Condition(s)
-033	VE		9	annual	08-September	30 minutes		III. F.5, F.8 & F.9.
	PM		5	five years	120 days prior to exp. date	1 hour		III. F.6, F.8 & F.9. (waived per Condition F.7.)
	Pressure drop							III. F.10. & F.11.
-038	PM		5	annual	27-February	1 hour		III. H.8. & H.20.
	F (Fluoride)		13A or 13B	annual	27-February	1 hour		III. H.6., H.7., & H.20.
	VE		9	annual	27-February	30 minutes		III. H.9 & H.20.
	Pressure drop							III. H.13, H.14. & H.18.
	Water flow rate							III. H.15. & H.18.
	N:P ratio							III. H.16. & H.18.

Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.
**CMS [=] continuous monitoring system

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

U.S. Agri-Chemicals Corporation	**PROPOSED Permit Renewal No.** 1050051-019-AV
Ft. Meade Chemical Plant	(Initial Title V Permit No. 1050051-003-AV)
	Facility ID No.: 1050051

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
036	Facility-Wide Fugitive Emissions - consisting of the following:

Emissions from tanks not regulated by a standard (Caustic tanks, water treatment chemical tanks/totes/drums, process water tanks, seal oil tanks, containers, reservoirs, tanks for oils, gasoline and grease, mineral acid storage tanks, fluosilicic acid tanks, chlorine tanks, rail and truck tank cars)
Water treatment system vents
Minor gas leaks (pumps, ductwork, vessels, valves and flanges)
Process water cooling ponds, recirculation & management systems (ditches, canals, ponds, reservoirs, treatment basins, etc.)
Scrubber seal tanks
Maintenance shops
Service of air pollution control devices
Unclogging ducts, chutes, equipment
Cleaning/steam cleaning
Hydroblasting
Sandblasting
Cold cleaning degreasers
Maintenance of facilities
Maintenance of grounds (mowing, weed spraying, etc.)
Refrigeration systems (with less than 50 lbs. of ozone-depleting compounds)
Laboratory and instrument vents
Fire training exercises
Degassifiers/deaerators
Mobile equipment fueling operations (diesel & unleaded gasoline)
Mobile sources (mobile internal combustion engines, mobile water pumps, mobile compressors, mobile generators, mobile welding units, mobile sand blasting units, etc.)

Internal-combustion engines (less than 400 hours per year for stationary equipment)
Liquid loading and unloading
Land reclamation activities
Transfer of materials on covered belt systems
Wet rock storage and transfer
Cooling Towers (using no chromium treatment chemicals)
Wastes management activities
Agricultural activities

Appendix H-1, Permit History/ID Number Changes

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No. 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
-005	Phosphoric Acid Plant A-Train	AC53-103831	08/22/85	04/01/87		
		AO53-132076	06/17/87	06/16/92		
		Amendment	08/12/87	06/16/92		
		AO53-212733	07/07/92	06/16/97		
		Amendment	09/04/92	06/16/97		
		Amendment	05/28/93	06/16/97		
		1050051-004-AC	07/29/97	06/06/98		
		1050051-005-AC	01/27/98	12/31/98		
		1050051-011-AC	06/14/00	03/31/01		
		1050051-012-AC	09/19/00	03/31/01		
-006	Auxiliary Boiler	AC53-33822	12/24/80	09/30/83		
		AO53-151039	09/14/88	09/02/93		
		AO53-234085	09/13/93	09/08/98		

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Not included in this table: Operating permits issued prior to 1987, ownership transfers, and construction permit time extensions for expired construction permits.

Appendix H-1, Permit History/ID Number Changes

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No. 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
-016	Sulfuric Acid Plant No. 1	AC53-33818	12/24/80	09/30/83		
		AC53-103829	08/22/85	04/01/87		
		AO53-132413	06/24/87	06/16/92		
		Amendment	04/14/89	06/16/92		
		AO53-212737	11/20/92	06/16/97		
		AO53-212737A	07/10/95	06/16/97		
-017	Sulfuric Acid Plant No. 2	AC53-33819	12/24/80	09/30/83		
		AC53-081664	08/27/85	04/01/87		
		AO53-132414	06/24/87	06/16/92		
		Amendment	04/14/89	06/16/92		
		AO53-212738	11/20/92	06/16/97		
		AO53-212738A	07/10/95	06/16/97		

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}
3 - Title V administrative permit correction.
Not included in this table: Operating permits issued prior to 1987, ownership transfers, and construction-permit time-extensions for expired construction permits.

Appendix H-1, Permit History/ID Number Changes

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No. 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
-020	Phosphoric Acid Plant B-Train	AC53-103830	08/22/85	04/01/87		
		AO53-132077	06/17/87	06/18/92		
		AO53-212734	07/07/92	06/16/97		
		Amendment	09/04/92	06/16/97		
		Amendment	05/28/93	06/16/97		
		1050051-005-AC	01/27/98	12/31/98		
		1050051-011-AC	06/14/00	03/31/01		
		1050051-012-AC	09/19/00	03/31/01		
-021	Phosphoric Acid Plant Tank Farm	AC53-33868	12/24/80	12/06/92		
		AO53-150848	08/31/88	08/26/93		
		AO53-229855	10/19/93	08/26/98		
		Amendment	11/03/93	08/26/98		
		1050051-005-AC	01/27/98	12/31/98		
		1050051-011-AC	06/14/00	03/31/01		
		1050051-012-AC	09/19/00	03/31/01		
-028,	Molten Sulfur Storage and	AC53-169795	03/27/90	01/01/91		

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}
3 - Title V administrative permit correction.
Not included in this table: Operating permits issued prior to 1987, ownership transfers, and construction-permit time-extensions for expired construction permits.

Appendix H-1, Permit History/ID Number Changes

U.S. Agri-Chemicals Corporation
Ft. Meade Chemical Plant

PROPOSED Permit Renewal No. 1050051-019-AV
(Initial Title V Permit No. 1050051-003-AV)
Facility ID No.: 1050051

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1, 2]	Revised Date(s)
-029,	Handling System	AO53-188251	04/26/91	04/29/96		
-030, -031		AC53-270480	07/13/95	12/31/95		
-032	MAP Plant, MAP/*DAP* Loadout & *Storage* System	AC53-260190/ PSD-FL-222	09/29/95	12/30/97		
		Amendment	10/19/98	12/30/98		
		Amendment	11/04/98	03/31/99		
		1050051-014-AC	05/23/01	06/01/02	11/30/02	
-033	Lime Silo	AO53-238044	11/19/93	11/17/98		
-038	Granular MAP/DAP Plant	1050051-008-AC	09/28/99	06/01/02		
All	Initial Title V Permit	1050051-003-AV	09/11/98	09/09/03		05/15/00, 09/02/01, *10/16/01[3], 07/31/02*

ID Number Changes (for tracking purposes):

From: **Facility ID No.**: 40TPA530051
To: **Facility ID No.**: 1050051

Notes:
1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.
{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}
3 - Title V administrative permit correction.
Not included in this table: Operating permits issued prior to 1987, ownership transfers, and construction-permit time-extensions for expired construction permits.

US Agri-Chemicals Corporation
Ft. Meade Facility
Facility ID #: 1050051

APPENDIX CAM
Compliance Assurance Monitoring Requirements

Compliance Assurance Monitoring Requirements

Pursuant to Rule 62-213.440(1)(b)1.a., F.A.C., the CAM plans that are included in this appendix contain the monitoring requirements necessary to satisfy 40 CFR 64. Conditions 1. – 17. are generic conditions applicable to all emissions units that are subject to the CAM requirements. Specific requirements related to each emissions unit are contained in the attached tables, as submitted by the applicant and approved by the Department.

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.

[40 CFR 64.6(a)]

2. The attached CAM plan(s) include the following information:
   (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
   (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
   (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.

[40 CFR 64.6(c)(1)]

3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5.-14.**) and reporting exceedances or excursions (see **CAM Conditions 15. – 16.**).

[40 CFR 64.6(c)(2)]

4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5.- 16.**).

[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.

[40 CFR 64.7(a)]

6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[40 CFR 64.7(b)]

7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[40 CFR 64.7(c)]

8. Response to excursions or exceedances.

a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[40 CFR 64.7(d)(1) & (2)]

9. Documentation of need for improved monitoring. If the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

10. Based on the results of a determination made under **CAM Condition 8b.**, above, the permitting authority may require the owner or operator to develop and implement a QIP. Consistent with **CAM Condition 4.**, an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a reporting period, may require the implementation of a QIP. The threshold may be set at a higher or lower percent or may rely on other criteria for purposes of indicating whether a pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.

[40 CFR 64.8(a)]

11. Elements of a QIP:

a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.

b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

(i) Improved preventive maintenance practices.

(ii) Process operation changes.

(iii) Appropriate improvements to control methods.

(iv) Other steps appropriate to correct control performance.

(v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

12. If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the permitting authority if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[40 CFR 64.8(c)]

13. Following implementation of a QIP, upon any subsequent determination pursuant to **CAM Condition 8.b.**, the permitting authority may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

a. Failed to address the cause of the control device performance problems; or

b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

14. Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

15. General reporting requirements.

a. Commencing from the effective date of this permit, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.

b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:

(i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10.** through **14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.

a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10.** through **14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

17. It should be noted that nothing in this appendix shall:

a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those

emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.

b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.

c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

Emissions Units 005 & 020

Phosphoric Acid Plants A & B Trains
Fluoride Emissions Controlled By Venturi Scrubbers Using Pond Water

Monitoring Approach

	Indicator No. 1	Indicator No. 2
I. Indicator	Pressure drop across each scrubber.	Scrubber liquid flow rate to each scrubber.
II. Measurement Approach	Pressure drop is measured with a differential pressure meter.	The scrubber liquid flow rate is measured by a mag flow meter.
III. Indicator Range	An excursion is defined as a pressure drop outside the following ranges: A-Train: 10.2–17.8 Inches H_2O. B-Train; 9.8-17.6 Inches H_2O. An excursion shall trigger an inspection, corrective action as necessary and a recordkeeping requirement.	An excursion is defined as a scrubber liquid flow rate outside the following ranges: A-Train: 38-270 gpm B-Train: 48-257 gpm An excursion shall trigger an inspection, corrective action as necessary and a recordkeeping requirement.
IV. Performance Criteria		
a. Data Represent-ativeness	The minimum accuracy of the device is $\pm$5%.	The minimum accuracy of the device is $\pm$ 5%.
b. Verification of Operational Status	Operator check and computer alarm.	Operator check and computer alarm.
c. QA/QC Practices and Criteria	The differential pressure meter is calibrated periodically.	The flow meter is calibrated periodically.
d. Monitoring Frequency	The pressure drop is monitored continuously.	The scrubber liquid flow is monitored continuously.
e. Data Collection Procedures	Daily averages are computed.	Daily averages are computed.
f. Averaging Period	Daily average.	Daily average.

Emissions Units 032 & 038

Prilled MAP/DAP Plant
Granular MAP/DAP Plant
Fluoride & Particulate Matter Emissions Controlled By Venturi Scrubbers Using Pond Water

Monitoring Approach

	Indicator No. 1	Indicator No. 2
V. Indicator	Pressure drop across each scrubber.	Scrubber liquid flow rate to each scrubber.
VI. Measurement Approach	Pressure drop is measured with a differential pressure meter.	The scrubber liquid flow rate is measured by a mag flow meter.
VII. Indicator Range	An excursion is defined as a pressure drop outside the ranges shown in the tables below. An excursion shall trigger an inspection, corrective action as necessary and a recordkeeping requirement.	An excursion is defined as a pressure drop outside the ranges shown in the tables below. An excursion shall trigger an inspection, corrective action as necessary and a recordkeeping requirement.
VIII. Performance Criteria		
a. Data Represent-ativeness	The minimum accuracy of the device is $\pm$5%.	The minimum accuracy of the device is ± 5%.
b. Verification of Operational Status	Operator check and computer alarm.	Operator check and computer alarm.
c. QA/QC Practices and Criteria	The differential pressure meter is calibrated periodically.	The flow meter is calibrated periodically.
d. Monitoring Frequency	The pressure drop is monitored continuously.	The scrubber liquid flow is monitored continuously.
e. Data Collection Procedures	Daily averages are computed.	Daily averages are computed.
f. Averaging Period	Daily average.	Daily average.

Ranges for Indicator No. 1—Pressure Drop

Emission Unit/Control Device	Indicator Ranges (Inches H_2O)	
	Maximum	Minimum
Prilled MAP—Tower Venturi	26	14
Prilled MAP—Cooler Venturi	20	6
Granular MAP/DAP—Tower Venturi	24.4	6.8
Granular MAP/DAP—Cooler Venturi	25.6	8.8
Granular MAP/DAP—Absorber	7.8	3.6

Ranges for Indicator No. 2—Scrubber Liquid Flow Rate

Emission Unit/Control Device	Indicator Ranges (gpm)	
	Maximum	Minimum
Prilled MAP—Tower Venturi	1244	1145
Prilled MAP—Cooler Venturi	363	214
Granular MAP/DAP—Tower Venturi	1382	375
Granular MAP/DAP—Cooler Venturi	531	175
Granular MAP/DAP—Absorber	658	156

Friday, Barbara

To: Nasca, Mara; 'jkoogler@kooglerassociates.com'

Cc: Arif, Syed

Subject: PROPOSED Title V Permit Renewal No.: 1050051-019-AV - U.S. Agri-Chemicals Corporation, Ft. Meade Chemcial Plant

Attachments: 1050051.019.AV.P[1].zip

Attached for your records is a zip file for the subject PROPOSED Title V Permit Renewal.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday
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