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Jeffrey W. Golwitzer, Facility Manager

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Jeffrey W. Golwitzer
 Facility Manager
 Mosaic Fertilizer, LLC
 7450 Highway 630
 Mulberry, Florida 33860

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Jeffrey W. Golwitzer

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Jeffrey W. Golwitzer

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DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT
BUREAU OF AIR REGULATION • TITLE V
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

M& S&S

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JUL 24 2006

BUREAU OF AIR REGULATION

NOTICE OF FINAL TITLE V AIR OPERATION PERMIT

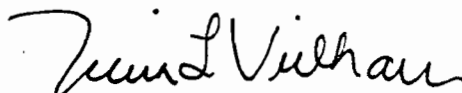
In the Matter of an
Application for Permit Renewal:

Jeffrey A. Golwitzer	FINAL Permit Project No.: 1050055-014-AV
Facility Manager	South Pierce Facility
Mosaic Fertilizer, LLC 7450 Highway 630 Mulberry, Florida 33860	Polk County

Enclosed is the FINAL Permit, No. 1050055-014-AV. The purpose of this permit is to renew the Title V Air Operation Permit, incorporate construction permits, No. 1050055-013-AC and No. 1050055-015-AC, incorporate the Compliance Assurance Monitoring (CAM) Plan, incorporate a Compliance Plan (CP-1), and incorporate Alternate Sampling Plans 05-J-AP and 05-L-AP. The facility is located in Polk County. This permit renewal is issued pursuant to Chapter 403, Florida Statutes (F.S.). There were no comments received from Region 4, U.S. EPA, regarding the PROPOSED Permit.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

TV/JFK/rlb

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT (including the FINAL Determination and the FINAL Permit) was sent by certified mail or electronically (with Received Receipt) before the close of business on 7/18/06 to the person(s) listed or as otherwise noted:

Jeffrey Golwitzer, Facility Manager, Mosaic Fertilizer, LLC, 7450 Highway 630, Mulberry, Florida 33860

The undersigned duly designated deputy agency clerk hereby certifies that a copy of this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT was sent by U.S. Mail or electronically (with Received Receipt) before the close of business on 7/18/06 to the person(s) listed or as otherwise noted:

John B. Koogler, PhD., P.E., Koogler and Associates

Pradeep Raval, Consultant, Koogler and Associates

Dean Ahrens, Environmental Superintendent, Mosaic Fertilizer, LLC

C.D. Turley, Mosaic Fertilizer, LLC

Jason Waters, FDEP- SWD

U.S. EPA, Region 4

Barbara Friday, BAR [barbara.friday@dep.state.fl.us] (for posting with Region 4 , U.S. EPA)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Barbara Friday (Clerk) 7/18/06 (Date)

STATEMENT OF BASIS

Mosaic Fertilizer, LLC
South Pierce Facility
Facility ID No.: 1050055
Polk County

Title V Air Operation Permit Renewal
FINAL Permit No.: 1050055-014-AV

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 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.

The subject of this permit is for the renewal of Title V Air Operation Permit and the incorporation of air construction permit, No. 1050055-013-AC, air construction permit, No. 1050055-015-AC, the incorporation of a Compliance Plan, CP-1, and two alternate sampling plans, file no. 05-J-AP and 05-L-AP.

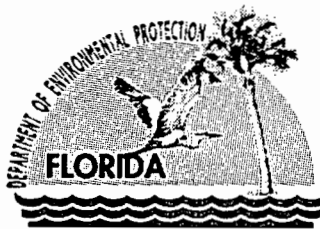
Air construction permit No. 1050055-013-AC adds a new molten sulfur pit with a 250 ton capacity to the facility. Molten Sulfur is unloaded into pits via truck or rail. The material is either pumped into storage tanks or into the transfer pit. The transfer pit is used to pump molten sulfur to the sulfuric acid plant or back into the storage tanks. The current pit has two sections. The transfer section is being replaced by the new molten sulfur transfer pit. The existing transfer pit will no longer be used once the new pit is in operation. The existing truck unloading section of the pit will continue to be used. The permitted system throughput rate is to remain unchanged; 2,300 tons per day (5 day rolling average), and 725,000 tons per 12 month consecutive period.

Air construction permit No. 1050055-015-AC will delete ten emissions units (EU) from the current Title V operating permit. The emissions units are 1) EU No.003- Purified Monoammonium /Diammonium (MAP/DAP) Plant, 2) EU No. 012- Purified MAP/DAP Plant Silo No.3, 3) EU No. 013- Purified MAP/DAP Plant Bagging Machine, 4) EU No. 014- Purified MAP/DAP Plant Bulk Truck Loading, 5) EU No. 027- Purified MAP/DAP Plant Silo No.2, 6) EU No. 028- Purified MAP/DAP Plant Silo No.1, 7) EU No. 029- Purified MAP/DAP Plant Bulk Railcar Loading, 8) EU No. 034- Vent 5, Molten Sulfur Rail Pit, North Vent, 9) EU No. 044- Molten Sulfur Rail Pit, North Vent, and 10) EU No. 045- Molten Sulfur Rail Pit, South Vent.

The fertilizer complex processes phosphate rock into several different fertilizer products. This is accomplished by reacting the phosphate rock with sulfuric acid to produce phosphoric acid and then converting the phosphoric acid to fertilizer. This facility consists of two sulfuric acid plants (SAP #10 and SAP #11); two phosphoric acid plants (Trains A and B); an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; a ball mill grinding system; GTSP storage building; and a GTSP rock hopper. CAM does apply.

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

The Department has determined that this facility is a major source of hazardous air pollutants (HAP) based on the following: The application for Title V air operation permit renewal received September 26, 2003; estimation of hydrogen fluoride emissions; and testing conducted at the facility in May 2005 in accordance with Compliance Plan CP-1.



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

Permittee:

Mosaic Fertilizer, LLC
7450 Highway 630
Mulberry, FL 33860

FINAL Permit No.: 1050055-014-AV

Facility ID No.: 1050055

SIC Nos.: 28, 2874

Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit, incorporate construction permits, No. 1050055-013-AC and No. 1050055-015-AC, incorporate the Compliance Assurance Monitoring (CAM) Plan, incorporate a Compliance Plan (CP-1), and incorporate Alternate Sampling Plans 05-J-AP and 05-L-AP. The existing facility is located at 7450 Highway 630, Mulberry, Polk County; UTM Coordinates: Zone 17, 407.5 km East and 3071.4 km North; Latitude: 27° 46' 56" North and Longitude: 81° 55' 55" 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 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:

Attachment A, Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants

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

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

APPENDIX TV-5, TITLE V CONDITIONS (version dated 4/5/05)

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)

40 CFR 63 Subparts A (General Provisions for Subparts AA and BB (Combined)

40 CFR 61 Subpart A (General Provisions) and Subpart R (Radon Emissions from Phosphogypsum Stacks)

Compliance Plan CP-1

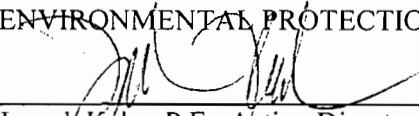
Alternate Sampling Plans, Approved 10/19/05 and 12/20/05

Effective Date: 7/12/2006

Renewal Application Due Date: 1/12/2011

Expiration Date: 7/12/2011

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION


Joseph Kahn, P.E., Acting Director
Division of Air Resource Management

JK/JFK/rlb

"More Protection, Less Process"

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Mosaic Fertilizer, LLC
South Pierce Facility
Facility ID No.: 1050055
Polk County

Title V Air Operation Permit Renewal
FINAL Permit No.: 1050055-014-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-0114
Fax: 850/921-9533

Compliance Authority:
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600
Fax: 813/632-7668

Title V Air Operation Permit Renewal
FINAL Permit No.: 1050055-014-AV

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Title V Air Operation Permit Renewal
FINAL Permit No.: 1050055-014-AV

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Compliance Assurance Monitoring (CAM) Plan
Compliance Plan CP-1
Alternate Sampling Plans, approved 10/19/05 and 12/20/05, ASP 05-5-AP and ASP 05-L-AP

Permittee:

Mosaic Fertilizer, LLC
7450 Highway 630
Mulberry, FL 33860

FINAL Permit No.: 1050055-014-AV**Facility ID No.:** 1050055**SIC Nos.:** 28, 2874**Project:** Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit, incorporate construction permits, No. 1050055-013-AC and No. 1050055-015-AC, incorporate the Compliance Assurance Monitoring (CAM) Plan, incorporate a Compliance Plan (CP-1), and incorporate Alternate Sampling Plans 05-J-AP and 05-L-AP. The existing facility is located at 7450 Highway 630, Mulberry, Polk County; UTM Coordinates: Zone 17, 407.5 km East and 3071.4 km North; Latitude: 27° 46' 56" North and Longitude: 81° 55' 55" 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 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:

Attachment A, Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants

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40 CFR 63 Subparts A (General Provisions for Subparts AA and BB (Combined)

40 CFR 61 Subpart A (General Provisions) and Subpart R (Radon Emissions from Phosphogypsum Stacks)

Compliance Plan CP-1

Alternate Sampling Plans, Approved 10/19/05 and 12/20/05

Effective Date: 7/12/2006**Renewal Application Due Date:** 1/12/2011**Expiration Date:** 7/12/2011

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Joseph Kahn, P.E., Acting Director
Division of Air Resource Management

JK/JFK/rlb

Section I. Facility Information.

Subsection A. Facility Description.

The fertilizer complex processes phosphate rock into several different fertilizer products. This is accomplished by reacting the phosphate rock with sulfuric acid to produce phosphoric acid and then converting the phosphoric acid to fertilizer. This facility consists of two sulfuric acid plants; two phosphoric acid plants (Trains A and B); an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; one dry ball mill grinding system; GTSP storage building; and a GTSP rock hopper.

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

The Department has determined that this facility is a major source of hazardous air pollutants (HAP) based on the following: The application for Title V air operation permit renewal received September 26, 2003; estimation of hydrogen fluoride emissions; and testing conducted at the facility in May 2005 in accordance with Compliance Plan CP-1. CAM does apply to Emission Unit 023, GTSP production plant.

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-001	Auxiliary Boiler
-004	Sulfuric Acid Plant #10
-005	Sulfuric Acid Plant #11
-008	Phosphoric Acid Plant - A Train
-009	Phosphoric Acid Plant - B Train
-022	No. 2 Ball Mill Grinding System
-023	GTSP Production Plant
-024	GTSP East Storage Building - North Scrubber
-025	GTSP East Storage Building - South Scrubber
-026	GTSP Rock Hopper Bin
-030	Molten Sulfur Storage - (East) Tank 1 - Vent 1
-031	Molten Sulfur Storage - (East) Tank 1 - Vent 2
-032	Molten Sulfur Storage - (East) Tank 1 - Vent 3
-033	Molten Sulfur Storage - (East) Tank 1 - Vent 4
-035	Molten Sulfur Storage - (West) Tank 2 - Vent 1
-036	Molten Sulfur Storage - (West) Tank 2 - Vent 2
-037	Molten Sulfur Storage - (West) Tank 2 - Vent 3
-038	Molten Sulfur Storage - (West) Tank 2 - Vent 4
-039	Molten Sulfur Storage - (West) Tank 2 - Vent 5
-040	Molten Sulfur Truck Pit - East Vent with Fan
-041	Molten Sulfur Truck Pit - East Vent without Fan
-042	Molten Sulfur Truck Pit - West Vent with Fan
-043	Molten Sulfur Truck Pit - West Vent without Fan
-048	Phosphogypsum Stack
-050	Molten Sulfur Transfer Pit with two vents

Unregulated Emissions Units and/or Activities
-049 Facility-Wide Fugitive Emissions

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

These documents are on file with permitting authority:

Application for a Title V Air Operation Permit Renewal received September 29, 2003

Additional Information Request dated November 21, 2003

Additional Time Request received February 19, 2004

Additional Information Response received April, 22, 2004

Additional Information Request dated May 20, 2004

Additional Information Response received July 12, 2004

Additional Information Request dated August 11, 2004

Additional Information Response received October 25, 2004

Comments on Draft Compliance Plan received February 10, 2005

Draft Permit issued March 22, 2005

Comments of Draft Permit received May 18, 2005

Additional Information Received September 7, 2005

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) 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.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-5, TITLE V CONDITIONS, 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 a 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.
[Rules 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, MD 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]
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. Compliance Plan. Based on the application, emissions units were not in compliance. Appendix CP-1, Compliance Plan, is a part of this permit and the permittee shall comply with CP-1.
[Rule 62-213.440(2), F.A.C.]

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, and industrial related activities such as loading, unloading, storing and handling. These precautions shall include good work practices such as the use of water to keep roadways and work areas damp to control dust and windborne emissions.

[Rule 62-296.320(4)(c)2., F.A.C.]

9. 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.]

10. 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 permitted capacity in the permit.

[Rule 62-297.310, F.A.C.]

11. The permittee shall submit to the Southwest District Office of the Department, each calendar year, on or before March 1, a completed DEP Form 62-213.900 (4), an "Annual Operating Report (AOR) 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. Hours of operation;
- d. Any changes in the information contained in the permit.

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

12. Hours of Operation - Unless otherwise noted, all emission units are allowed to operate continuously, i.e., 8760 hours/year. [Rule 62-210.200, F.A.C., Definitions - (PTE)]

13. Better Grade Fuel Oil

A better grade fuel oil is defined as a fuel oil with a higher ranking in the following list:

Better Grade (Top of list)

new, No. 2 fuel oil, or No. 2 on-specification fuel oil
new, No. 3 fuel oil, or No. 3 on-specification fuel oil
new, No. 4 fuel oil, or No. 4 on-specification fuel oil
new, No. 5 fuel oil, or No. 5 on-specification fuel oil
new, No. 6 fuel oil, or No. 6 on-specification fuel oil

14. 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. {Permitting note: When quarterly reporting is specified within, this shall be interpreted to be mean calendar quarters. When reporting refers to monthly, this shall be interpreted as the beginning of each month.}

[Rule 62-213.440, F.A.C.]

15. 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
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600
Fax: 813/632-7668

16. 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

17. This permit includes a "Subsection" for each emission unit which includes a description of that emission unit. That description is descriptive only and is not enforceable.

18. 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)}

19. 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.]

20. The permittee shall comply with Alternate Sampling Plans, File No. 05-J-AP executed October 19, 2005 and File No. 05-L-AP, executed on December 20, 2005.

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

NOTES to PERMITTEE:

Based on a modeling study approved by the Department, it was determined that emissions from this facility will not have a significant impact on the Hillsborough County Air Quality Maintenance Area and it is therefore exempt from the PM RACT requirements in accordance with Rule 62-296.700(2)(b), F.A.C. The following emission units have permitted particulate emission limits and are subject to modeling in order to demonstrate to the department that this facility will not have a significant impact on the Air Quality Maintenance Area.

Subsection	E.U. I.D. No.	Description	Particulate Matter (PM) Limit	
			lbs/hr	Tons per year
A	001	Auxiliary Boiler	2.4	10.7
D	022	No. 2 Ball Mill Grinding System	31.8	139.3
E	023	GTSP Production Plant	35	153
F	024-025	GTSP East Storage Building - North scrubber system	40.1	175.6
G	026	GTSP Rock Hopper Bin	22.5	
H	030-033	Molten Sulfur Storage - East Tank	0.50 ²	1.40 ²
H	035-039	Molten Sulfur Storage - West Tank	0.50 ²	1.40 ²
H	040-043	Molten Sulfur Storage - Truck Pit	0.92 ²	4.06 ²
Total			133.22	

²Emission estimate for emission inventory and PSD purposes.

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-001	Auxiliary Boiler

The 171 MMBtu per hour auxiliary boiler is used to supply auxiliary steam to the South Pierce facility. The boiler is fired on natural gas or No. 2 fuel oil.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800(7)(b)3., F.A.C.; NESHAP - 40 CFR 63, Subpart DDDDD, NESHAP for ICI Boilers; and 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. CAM does not apply.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Capacity.

- The maximum heat input rate is 171 MMBtu per hour when firing either natural gas or No. 2 fuel oil.
- The maximum fuel oil firing rate for the boiler shall not exceed 1,070,000 gallons in any consecutive 12 month period.
- The maximum natural gas firing rate for the boiler shall not exceed 150.0 million cubic feet in any consecutive 12 month period.
- The annual capacity factor (12-month rolling average basis) for the boiler shall not exceed 10 percent.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), Air Construction Permit 1050055-011-AC]

{Permitting Note: Requested by permittee to limit annual operations to 10 percent of maximum to avoid particulate matter and nitrogen oxides emission standards under 40 CFR 60 Subpart Db.}

A.2. Methods of Operation - (i.e., Fuels). The boiler is permitted to fire only natural gas or No. 2 fuel oil (see Condition No. 19). The No. 2 fuel oil shall have a maximum sulfur content of 0.5%, by weight.

[Rules 62-4.160(2), F.A.C. and 62-213.440(1), F.A.C., requested by permittee, Construction permit 1050055-011-AC]

Emission Limitations and Standards

A.3. Visible emissions from the boiler stack shall not exceed 20% opacity, except for one six-minute period per hour during which the opacity shall not exceed 27%.

[40 CFR 60.43b(f), Rule 62-296.406(1), F.A.C.]

A.4. 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 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.]

A.5. 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.]

A.6. In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.]

Test Methods and Procedures

A.7. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department in writing at least 15 days prior to the date on which each formal compliance test is to begin. The notification will include the date, the time, and the place of each such test, and the test 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.].

A.8. Within 60 days after achieving the maximum boiler production rate at which the auxiliary boiler will be operated, but not later than 180 days after initial startup of the auxiliary boiler, and annually thereafter, the permittee shall test the boiler stack for visible emissions, per Condition A.3.

[Rule 62-297.310(7) and 62-297.310(8), F.A.C., 40 CFR 60.8, and Air Construction Permit 1050055-011-AC]

A.9. Compliance with the visible emission limitation of Condition A.3 shall be determined using DEP Method 9 and shall be conducted by a certified observer and be a minimum of 60 minutes in duration.

[Rule 62-297.310(4)(a), F.A.C.]

A.10. Testing of visual emissions per Condition A.3 should be conducted during a period when the boiler is cycling up to a normal high firing rate, or is continuously operating at a high firing rate. The permittee shall submit a statement of the operating mode. Failure to submit a statement of the operating mode or operating at less than capacity, may invalidate the test or result in an operating permit limitation.

[Rules 62-297.310(8) and 62-4.070(3), F.A.C.]

A.11. If the hours of operation of the boiler utilizing fuel oil exceed 400 hours since the prior test date, the visible emissions test for the current test year shall be conducted using fuel oil. The visible emissions test for the boiler can be waived, on an annual basis, if the total time that fuel oil has been utilized in the boiler does not exceed 400 hours. In order to qualify for the annual visible emissions test waiver, a letter shall be sent to the Air Compliance Section of the Department of Environmental Protection, at least 15 days prior to the scheduled test date, requesting a visible emissions test waiver and stating that the 400 hour fuel oil limitation has been satisfied for the year prior to the date of the waiver request. Submit with the waiver request a copy of the fuel oil analysis or certification required by Condition A.13. If no fuel oil was utilized, a copy of the fuel oil analysis or certification

is not required. A waiver will not be granted for the visible emission tests (See Condition A.4) for the 12 month period prior to permit renewal.

[Rules 62-297.310(7) and 62-297.310(8), F.A.C.]

A.12. If the Department of Environmental Protection has reason to believe 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.]

A.13. The annual visible emissions test will not be required if the emissions unit does not fire No. 2 fuel oil more than 200 hours per year. The emissions unit will be required to perform the visible emissions test once every five years upon permit renewal.

[Rule 62-297.310, F.A.C.]

Monitoring of Operations

A.14. Except for Saturdays and Sundays, the permittee shall measure the visible emissions from the boiler stack at least once every four hours during daylight shifts when No. 2 fuel oil is combusted in the auxiliary boiler. Each VE observation shall be performed by a certified VE observer and be 6 minutes in duration. If the average opacity for a six-minute set of readings exceeds 10 percent, the observer must collect two additional six-minute sets of visible emission readings for a total of three data sets.

[40 CFR 60.13(i)(2), letter from Douglas Neeley, U.S. EPA dated September 23, 1998, in lieu of continuous monitoring requirements in 40 CFR 60.48b(a).]

A.15. The permittee shall maintain the auxiliary boiler according to the procedures and schedules recommended by the boiler manufacturer for a unit with a 10 percent annual operating factor. The permittee shall keep records verifying that the necessary maintenance activities have been performed.

[40 CFR 60.13(i)(2), letter from Douglas Neeley, U.S. EPA dated September 23, 1998, in lieu of continuous monitoring requirements in 40 CFR 60.48b(a).]

{Permitting Note: The permittee shall submit the maintenance procedures and schedules for the auxiliary boiler (recommended by the manufacturer) to the Department at least 30 days prior to the initial compliance emissions test.}

Recordkeeping and Reporting Requirements

A.16. The permittee shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include but not be limited to:

- (a) The design heat input capacity of the affected boiler and identification of the fuels to be combusted in the boiler, and
- (b) The annual capacity factor at which the permittee anticipates operating the boiler based on all fuels fired and based on each individual fuel fired.

[40 CFR 60.49b]

A.17. 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 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 a minimum, the "Project", "Facility ID" and "Point ID"), 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.]

A.18. The permittee shall furnish the Administrator written notification as follows:

- (a) A notification of the date construction (or reconstruction as defined under 40 CFR 60.15) of the auxiliary boiler is commenced postmarked no later than 30 days after such date.
- (b) A notification of the actual date of initial startup of the auxiliary boiler postmarked not more than 60 days nor less than 30 days prior to such date.
- (c) A notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

[40 CFR 60.7]

A.19. The permittee shall submit a statement of the fuel heat input rate and fuel in use as a part of the compliance test report. Failure to submit the heat input rate, fuel oil sulfur content, 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.]

A.20. In order to document compliance with Condition A.2, and provide reasonable assurance that No. 2 fuel oil is being utilized, and that the fuel oil sulfur limit of 0.5%, by weight is not exceeded, the permittee can provide either;

- a. vendor certified documentation that the fuel oil delivered was No. 2 oil, or
- b. a fuel oil analysis indicating the sulfur content, by weight.

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

A.21. The permittee shall maintain daily records of the hours of operation of the auxiliary boiler, the date and time of visible emission observations, the opacity (VE), the hourly steam load, the type and amount of fuel combusted in the boiler. On a monthly basis, the annual hours of operation of the boiler, and the type and amount of fuel used for the previous 12 months shall be determined and included in the records.

[40 CFR 60.43b(f), 40 CFR 60.49b(d), 40 CFR 60.49b(q), Rule 62-4.070(3), F.A.C.].

A.22. The permittee shall calculate and record the annual capacity factor individually for distillate fuel oil (i.e. No. 2) and natural gas for each calendar quarter. The permittee shall submit to the Department, for each quarter the boiler is operated other than maintenance purposes, the annual capacity factor over the previous 12 months. The annual capacity factor is determined on

a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

[40 CFR 60.49b(d), 40 CFR 60.49b(q)]

{Permitting Note: If the annual capacity factor ever exceeds 10 percent, the permittee would no longer qualify to use an opacity monitoring alternative, and would be required to put on a schedule for installing and certifying a continuous opacity monitor.}

A.23. The permittee shall submit an excess emissions report (EER) to the Department 30 days after the end of each calendar quarter in which there are opacity excess emissions during No. 2 fuel oil combustion. If there are no opacity excess emissions during the calendar quarter, EERs may be submitted on a semiannual basis. If the boiler has not been operated on oil during the prior 6-month period, for other than maintenance purposes, EERs may be submitted with the annual operating report (AOR).

[40 CFR 60.13(i)(2), letter from Douglas Neeley, U.S. EPA dated September 23, 1998 , in lieu of continuous monitoring requirements in 40 CFR 60.48b(a).]

{Permitting Note: For reporting purposes, excess emissions are defined as any six minute period during which the average opacity exceeds 20 percent, and EERs must indicate the total time of the visible emission observations during a calendar quarter and identify the duration of any excess emissions.}

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-004	Sulfuric Acid Plant #10
-005	Sulfuric Acid Plant #11

Sulfuric acid plant Units Nos. 10 and 11 consist of a double absorption system. These plants have a design production rate of 3,000 tons per day of sulfuric acid (100% H₂SO₄ basis). Acid mist emissions are controlled by high efficiency mist eliminators.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 296.402., F.A.C., Emission Standards for Sulfuric Acid Plants; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; and Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Best Available Control Technology (BACT) Determination, dated April 17, 1992. CAM does not apply.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The sulfuric acid production rate from each sulfuric acid plant shall not exceed 3,000 tons per day, measured as 100% H₂SO₄.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), Construction Permit 1050055-010-AC/PSD-FL-235]

B.2. The maximum molten sulfur throughput rate shall neither exceed 2,300 tons per day (calculated as a 5 day rolling average), nor 725,000 tons per year (based on a combined acid production capacity of 6,000 TPD of 100% sulfuric acid from Sulfuric Acid Plant Nos. 10 and 11).
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), 1050055-013-AC, Applicant Request dated April 15, 2003].

Emission Limitations and Standards

B.3. Sulfur dioxide emissions shall not exceed any of the following:

- a. 4 pounds per ton of 100% acid produced;
- b. 500 pounds per hour;
- c. 2,190 tons per year.

[Rule 62-204.800, F.A.C., 40 CFR 60.82(a), 1050055-010-AC/PSD-FL-235 and BACT Determination of September 15, 1997].

B.4. Acid mist emissions shall not exceed any of the following:

- a. 0.15 pounds per ton of 100% acid produced;
- b. 18.8 pounds per hour;
- c. 82.1 tons per year.

[Rule 62-296.800, F.A.C., 40 CFR 60.83(a)(1), 1050055-010-AC/PSD-FL-235 and BACT Determination of September 15, 1997].

B.5. Visible emissions shall not be equal to or greater than 10% opacity. [Rule 62-204.800, F.A.C., 40 CFR 60.83(a)(2), and BACT Determination of April 17, 1992].

B.6. Nitrogen oxides emissions shall not exceed any of the following:

- a. 0.12 pounds per ton of 100% acid produced;
- b. 15.0 pounds per hour;
- c. 65.7 tons per year.

[1050055-010-AC/PSD-FL-235 and BACT Determination of September 15, 1997].

B.7. 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 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.]

B.8. 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.].

B.9. In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.].

Excess Emissions

B.10. This permit acknowledges that leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions that do not pass through a stack, may occur as part of routine operations. Best operational practices to minimize these emissions shall be adhered to and shall include regular inspections and the prompt repair or correction of any leaks or other fugitive emissions.

Best operational practices for **Sulfuric Acid Plant #10 only** shall include but not limited to the following:

- a. The permittee shall inspect the burner floor for pooled sulfur once per day.
- b. On controlled shutdowns, if there is pooled sulfur in the burner, the permittee shall continue to purge with the blower at 1800 RPM. Once the sulfur is consumed, the permittee shall continue to purge for an additional two minutes.
- c. The permittee shall change out and maintain sulfur guns semiannually. The permittee shall test the spray pattern with water before installing replacement guns.

[Rules 62-210.700(1), F.A.C. and 62-4.070(3), F.A.C.]

Test Methods and Procedures

B.11. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department in writing at least 15 days prior to the date on which each formal compliance test is to begin. The notification will include the date, the time, and the place of each such test, and the test 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.].

B.12. The permittee shall test the emissions from Sulfuric Acid Plants No. 10 and No. 11 for opacity, sulfur dioxide, acid mist, and nitrogen oxides during each federal fiscal year (October 1 – September 30).

[Rule 62-297.310(7)(a)4, F.A.C.]

B.13. Compliance with the emission limitations of Conditions B.3, B.4, and B.6 shall be determined in accordance with 40 CFR 60.85 using EPA Methods 1, 2, 3, 7E, 8 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-297, F.A.C.]

B.14. The visible emissions test shall be conducted by a certified observer and be a minimum of sixty (60) minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rule 62-297.310(4)(a), F.A.C.]

B.15. 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, as a minimum, three times daily in accordance with 40 CFR 60.84(b) or equivalent method. A record of all conversion factors and values from which they were calculated shall be maintained. The permittee may also use the alternative method, including electronic data systems, of determining sulfur dioxide emission rates using the continuous emission monitoring approach and calculation procedures referenced in 40 CFR 60.84(d).

[Rule 62-204.800, F.A.C., and 40 CFR 60.84].

B.16. If the Department of Environmental Protection has reason to believe 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.]

Continuous Monitoring Requirements

B.17. The 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 and 62-296.402, F.A.C., and 40 CFR 60.84].

Recordkeeping and Reporting Requirements

B.18. In accordance with 40 CFR 60.7(b), the permittee shall maintain records of any periods during which the sulfur dioxide monitor system is inoperative. Records on monitoring system performance evaluations, calibrations and maintenance shall be maintained in accordance with 40 CFR 60.7(d).

[Rule 62-204.800, F.A.C., 62-4.070(3), and 40 CFR 60.7].

B.19. The permittee shall submit a written report of excess sulfur dioxide emissions quarterly in accordance with 40 CFR 60.7 (b) and (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. Copies of the quarterly sulfur dioxide excess emission report shall be submitted to the Southwest District Office. [Rule 62-204.800, F.A.C., and 40 CFR 60.7 and 60.84(e)].

B.20. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the sulfuric acid plants; or any malfunction of the air pollution control equipment.

[Rule 62-204.800(7)(b)10, F.A.C. and 40 CFR 60.7].

B.21. In order to document compliance with Condition B.1, the permittee shall maintain a daily record of sulfuric acid plant H_2SO_4 production for each emission unit. Documentation as to how daily production rates were calculated shall be included as part of the records.

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

B.22. In order to document ongoing compliance with the emission limitations of Conditions B.3 and B.4, 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/ton SO_2 emission rate;

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

B.23. 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 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 a minimum, the "Project", "Facility ID" and "Point ID"), 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.]

Reasonable Assurances

B.24. Not federally enforceable. The permittee shall follow the attached Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants.

[Signed and executed on November 1, 1989.]

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

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-008	Phosphoric Acid Plant - A Train
-009	Phosphoric Acid Plant - B Train

The Phosphoric Acid Plant (PAP) consists of an "A" and "B" Train. Fluoride emissions from the Phosphoric Acid Plant "A" and "B" Train reactors, filters, and other process equipment are controlled by two packed bed, cross-flow scrubbers.

{Permitting note(s): 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 62-296.403, F.A.C., Phosphate Processing, and 40 CFR 63 Subpart AA, Phosphoric Acid Manufacturing Plants. CAM does not apply. **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 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

C.1. Capacity. The maximum input process rate for each Phosphoric Acid Plant Train shall not exceed 55.45 tons per hour of equivalent P_2O_5 feed rate⁽¹⁾.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

⁽¹⁾ **"Equivalent P_2O_5 Feed Rate"** - the quantity of phosphorus, expressed as phosphorous pentoxide, feed to the process.

Emission Limitations and Standards

C.2. Total fluoride emissions⁽²⁾ from each Phosphoric Acid Plant Train shall not exceed 0.02 pounds per ton (10.0 gram/metric ton) of the equivalent P_2O_5 feed rate⁽¹⁾, and 1.11 pounds per hour at the maximum 55.45 tons per hour equivalent P_2O_5 feed rate. [Permit AC53-34868, 40 CFR 60.202, 40 CFR 63.602(a)]

⁽²⁾ **"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.

C.3. 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 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.]

C.4. 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.].

Test Methods and Procedures

C.5. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9. Test notification must be in accordance with § 63.9(e). This test requirement is more stringent than the state requirement of 15-day notification in 62-297.310, F.A.C.

[40 CFR 63.607(a)]

C.6. Each owner or operator of a phosphoric acid manufacturing plant shall conduct an annual performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

[40 CFR 63.606(a)(1), and Rule 62-297.310(7)(a)4, F.A.C.]

C.7. In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section (See SC C.11.) and in 62-297, F.A.C., except as provided in § 63.7(f). Each owner or operator of an existing wet-process phosphoric acid process line shall determine compliance with the applicable total fluorides standards in § 63.602 or § 63.603 (See SC C.2.) as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^N C_{si} Q_{sdi} \right) / (PK)$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P₂O₅ feed.

C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).

Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N = number of emission points associated with the affected facility.

P = equivalent P₂O₅ feed rate, metric ton/hr (ton/hr).

K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in Section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in section 7.3.3 and 7.3.4. in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P₂O₅ feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).

R_p = P₂O₅ content, decimal fraction.

(i) The accountability system described in § 63.605(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P₂O₅ content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of

Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

- (A) Section IX, Methods of Analysis For Phosphate Rock, No. 1
Preparation of Sample.
- (B) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method A-Volumetric Method.
- (C) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method B-Gravimetric Quimociac Method.
- (D) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method C-Spectrophotometric Method.
- (E) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method A-Volumetric Method.
- (F) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method B-Gravimetric Quimociac Method.
- (G) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method C-Spectrophotometric Method.

(4) To comply with § 63.605(d)(1) or (2) (see SC C.12.), the owner or operator shall use the monitoring systems in § 63.605(c) (See SC C.11) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2) (see SC C.12.).

[40 CFR 63.606(b) and (c)]

C.8. The following scrubber operating parameters shall be monitored and recorded during any compliance test and a summary of this data shall be included in any emissions test report:

The following apply to the Phosphoric Acid Plant Train A Only:

- a. the dates the pads were placed into service,
- b. the dates the pads were replaced,
- c. the dates the pads were inspected,
- d. the person responsible for performing the pad replacement or inspection,

The following apply to both Trains A & B (in accordance with 63.605):

- e. the water flow rate, and
- f. the scrubber pressure drop.

Failure to submit the scrubber operating parameters with the test report(s) may invalidate the test and fail to provide reasonable assurance of compliance.

[Rules 62-4.070(3), and 62-297.310(8)(c), F.A.C.]

C.9. This emission unit is also subject to the requirements of Alternate Sampling Plan, 05-L-AP, dated December 20, 2005.

[Alternate Sampling Plan, 05-L-AP, dated December 20, 2005]

C.10. If the Department of Environmental Protection has reason to believe 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.]

Monitoring of Operations

C.11. Each owner or operator using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range.

[40 CFR 63.605(c) and 40 CFR 60.203]

C.12. Following the date on which the performance test required in § 63.606 (See SC C.7.) is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (d)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ± 20 percent of the baseline average value determined as a requirement of § 63.606(c)(4) (See SC C.7.). The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ± 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.606(c)(4) (See SC C.7.). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.606(c)(4), (d)(4), or (e)(2) (See SC C.7.). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the

allowable ranges for use in § 63.604 (See SC C.13.) shall be based upon the range of baseline average values proposed for approval.
[40 CFR 63.605(d)]

C.13. On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.606 (See SC C.7.) is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of § 63.605(d)(1) or (2) (See SC 12.).
[40 CFR 63.604]

C.14. Each owner or operator of an existing wet-process phosphoric acid process line subject to the provisions of this subpart shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ± 5 percent over its operating range.
[40 CFR 63.605(a)]

Recordkeeping and Reporting Requirements

C.15. The owner or operator shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of paragraph (a) of this section and then by proceeding according to § 63.606(c)(3) (See SC C.7.). The permittee shall maintain a daily record of the equivalent P_2O_5 feed rate according to the procedure specified in 40 CFR 60.203(b)- Monitoring of Operations. The permittee daily log shall be maintained at the facility [40 CFR 63.605(b)(1), 40 CFR 60.203(b) and Rules 62-4.070(3), F.A.C., and 62-213.440(b)2.b., F.A.C.]

C.16. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:

(1) **Performance test report.** As required by § 63.10, the owner or operator shall report the results of the annual performance tests as part of the notification of compliance status required in § 63.9 and all applicable requirements of Rule 62-297.310(8), F.A.C. The 45-day test reporting requirements are more stringent in Rule 62-297.310(8), F.A.C.

(2) **Excess emissions report.** As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10, and the owner or operator shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. with a full written report on the malfunctions being submitted in a quarterly report.

(3) **Summary report.** If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report

shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.
[40 CFR 63.607 (b) and (c), and Rule 62-210.700(6), F.A.C.]

C.17. The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in the subpart A attachment to this permit. The facility is subject to the applicable conditions of Subpart A as they apply to the two existing phosphoric acid plants.
[40 CFR 63.608]

C.18. This emission unit is subject to specific requirements of 40 CFR 63, Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and Compliance Plan CP-1. The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA upon the effective date in the final promulgated rule. Subsequently, this permit will be reopened to incorporate any applicable updates in accordance with Rule 62-213.430(4), F.A.C. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:

- 1) Must comply with all conditions of Compliance Plan CP-1,
- 2) Must comply with all applicable requirements of Subparts A and AA,
- 3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to Subparts A, AA, and alternate sampling plan,
- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Subparts A and AA,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate sampling plan will negate use of any new ranges derived from the test.

[40 CFR 63- Subpart A, 40 CFR 63- Subpart AA, Compliance Plan (CP-1) and 62-4.070, F.A.C.]

C.19. Phosphoric Acid Plant Train A Only

After 12 months of service, the mesh pads in the scrubbers shall be inspected. If the results of the inspection indicate that replacement is not warranted, then the pads may continue in service. After the initial annual inspection, the mesh pads in the scrubber shall be inspected every six months until the scrubber mesh pads are replaced. The mesh pads shall be replaced, if warranted by the results of inspection or at any other earlier time based on the operator's judgment.

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

C.20. Phosphoric Acid Plant Train A Only

In order to provide reasonable assurance that the scrubber mesh pads are maintained per Condition C.8., the permittee shall establish a record log of the scrubber mesh pad inspection and replacement, which shall include, at a minimum:

- a. the dates the pads were placed into service,
- b. the dates the pads were replaced,

- c. the dates the pads were inspected, and
 - d. the person responsible for performing the pad replacement or inspection.
- [AO53-212236 and Rule 62-4.070(3), F.A.C.]

Reasonable Assurances

C.21. All reasonable precautions shall be taken to minimize and control the generation of fugitive fluoride emissions.
[Rule 62-4.070(3), F.A.C.]

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-022	No. 2 Ball Mill Grinding System

The No. 2 Ball Mill Grinding System is used for grinding dry, coarse phosphate rock. The system consists of a conveyor, ball mill and centrifugal classifier. Emissions are controlled by two (2) cyclonic separators venting to a baghouse. {Permitting note(s): This emissions unit is regulated under Rule 62-296.700, F.A.C., RACT Particulate Matter and Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. CAM does not apply.}

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

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The process/operation rate for the No. 2 Ball Mill Grinding System shall not exceed 70.0 tons per hour. [Based on 12/15/75 Construction Application]
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Emission Limitations and Standards

D.2. The maximum allowable particulate matter emission rate from the No. 2 Ball Mill Grinding System baghouse exhaust shall not exceed 31.8 pounds per hour and 139.3 tons per year. This particulate matter emission rate limitation qualifies the facility for the PM-RACT exemption per Rule 62-296.700(2)(b), F.A.C.
[Requested by applicant, Based on the 4/29/83 screen model memorandum for PM-RACT exemption]

D.3. Visible emissions from the baghouse exhaust, conveyor and associated equipment, shall not be equal to or greater than 20% opacity.
[Rule 62-296.320(4)(b), F.A.C.]

D.4. 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 but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

D.5. 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.].

D.6. In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.].

Test Methods and Procedures

D.7. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department in writing at least 15 days prior to the date on which each formal compliance test

is to begin. The notification will include the date, the time, and the place of each such test, and the test 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.].

D.8. Test the baghouse exhaust for visible emissions per Condition D.3 annually during each federal fiscal year (October 1 – September 30).
[Rule 62-297.310(7)(a)4, F.A.C.]

D.9. Test for particulate matter emissions per Condition D.2, on or during the 180 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. Testing at conditions that are not representative of actual operating conditions may invalidate the test.
[Rules 62-297.310(7), and 62-297.310(8), F.A.C.]

D.10. Compliance with the emission limitations of Conditions D.2 and D.3, 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 can be reasonably expected to occur. The visible emissions test shall be conducted by a certified observer and be a minimum of 60 minutes in duration.
[Rules 62-297.310(4)(a), and 62-4.070, F.A.C.]

D.11. If the Department of Environmental Protection has reason to believe 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.]

Monitoring of Operations

D.12. In order to demonstrate compliance with Rule 62-210.650, the permittee shall record the pressure drop across the baghouse daily.
[Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

D.13. In order to document compliance with the process rate limitation of Condition D.1, the permittee shall maintain daily records of the amount of material processed and the total hours of process operations.
[Rule 62-4.070(3), F.A.C.]

D.14. 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 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 a minimum, the "Project", "Facility ID" and "Point ID"), 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.

[Rules 62-297.310(8), F.A.C., and 62-4.070(3), F.A.C.]

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

E.U. ID

No.
-023

Brief Description
GTSP Production Plant

The Granular Triple Super Phosphate (GTSP) production plant has a permitted production rate of 140 tons per hour. Emission sources at the GTSP plant include the reactors, granulator, dryer, cooler, and miscellaneous points. The dryer is fired with natural gas or No. 6 fuel oil, or a better grade fuel oil.

Emissions from the reactors, granulator, cooler and miscellaneous points are vented to a venturi scrubber designated as the "RGCV" scrubber. Emissions from the cooler vent to a cyclone prior to the RGCV scrubber. Emissions from the dryer are vented to a separate cyclone followed by a venturi scrubber designated as the "Dryer" scrubber. The RGCV and Dryer scrubbers use pond water as the scrubbing liquid. Gases from the RGCV and Dryer scrubbers vent to a 2-stage packed bed tailgas scrubber then to the atmosphere at approximately 140,000 acfm. The packed bed tailgas scrubber also uses pond water as the scrubbing liquid.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, F.A.C., RACT Particulate Matter; Rule 62-296.403, F.A.C., Phosphate Processing; and 40 CFR 63, Subpart BB, Phosphate Fertilizer Production. CAM does apply. **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 following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Capacity.

- a. The GTSP plant production rate shall not exceed 140 tons per hour.
- b. The heat input rate for the dryer shall not exceed 113 MMBtu per hour when firing natural gas.
- c. The heat input rate for the dryer shall not exceed 65 MMBtu per hour when firing No. 6 fuel oil.

[Applicant Request for Natural Gas 10/16/95, Permit AO53-235041 amendment, 6/1/95 and Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

E.2. Methods of Operation - (i.e., Fuels). The dryer shall be fired only with natural gas, or No. 6 fuel oil or a better grade oil. [Applicant Request for Natural Gas 10/16/95, Permit AO53-235041 amendment, Rules 62-4.160(2), F.A.C. and 62-213.440(1), F.A.C.]

Emission Limitations and Standards

E.3. Granular triple superphosphate process line. On and after the date on which the performance test required to be conducted by §§ 63.7 and 63.626 (see SC E.12.) is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 75 grams/metric ton of equivalent P₂O₅ feed (0.150 lb/ton).

[40 CFR 63.622(b), Rule 62-296.403(1)(d)2. and application dated 7/23/93]

E.4. On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.626 (see SC E.12.) is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of § 63.625(f)(1) or (2) (see SC E.18).
[40 CFR 63.624]

E.5. Pursuant to Rule 62-296.320(4)(a), F.A.C. and the application dated 7/23/93, particulate matter emissions from this plant shall not exceed any of the following limits:

- a. 35 pounds per hour (based originally on 80 tons per hour production rate),
- b. For 80 tons per hour production rate or less:

Where: E = Emission limit in pounds per hour, and

P = Input process rate in tons per hour,

Then: (1) $E = (3.59) P^{0.62}$, where P is less than or equal to 30 tons per hour, or

(2) $E = (17.31) P^{0.16}$, where P is greater than 30 tons per hour,

- c. 153 tons per year.

This particulate matter emission rate limitation qualifies the facility for the PM-RACT exemption per Rule 62-296.700(2)(b), F.A.C. [Requested by applicant, Based on the 12/30/81 dispersion modeling memorandum for PM-RACT exemption]

E.6. Visible emissions from the GTSP plant shall not be equal to or greater than 20% opacity.
[Rules 62-296.320(4)(b), F.A.C.]

E.7. 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 but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

E.8. 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.]

Test Methods and Procedures

E.9. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9. Test notification must be in accordance with § 63.9(e). This test requirement is more stringent than the state requirement of 15-day notification in 62-297.310, F.A.C.
[40 CFR 63.607(a)]

E.10. Once every fiscal year, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section (see SC E.12.). The

owner of operator must Test the stack emissions for particulate matter, fluorides, and visible emissions annually during each federal fiscal year.

[40 CFR 63.626(a)(1) and Rule 62-297.310(7)(a)4, F.A.C.]

E.11. In conducting performance tests, each owner or operator of an affected source shall use EPA Methods 1,2,3,4,5,9 and 13A or 13B as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section (see SC E.18.), except as provided in § 63.7(f).
[40 CFR 63.626(b) and Rule 62-297, F.A.C.]

E.12. Each owner or operator of an existing granular triple superphosphate process line shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 (see SC E.3.) as follows:

(1) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \frac{N}{\sum_{i=1} C_{si} Q_{sdi}} (PK)$$

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P₂O₅ feed.

C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).

Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N = number of emission points associated with the affected facility.

P = equivalent P₂O₅ feed rate, metric ton/hr (ton/hr).

K = conversion factor, 1000 mg/g (453,600 mg/lb).

(2) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13 B is used, the fusion of the filtered material described in section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).

(3) The equivalent P₂O₅ feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).

R_p = P₂O₅ content, decimal fraction.

(i) The accountability system described in § 63.625(a) and (b) shall be used to determine the mass flow rate (M_p) of the phosphorus-bearing feed.

(ii) The P₂O₅ content (R_p) of the feed shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section IX, Methods of Analysis For Phosphate Rock, No. 1
Preparation of Sample.

(B) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method A-Volumetric Method.

(C) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method B-Gravimetric Quimociac Method.

(D) Section IX, Methods of Analysis For Phosphate Rock, No. 3
Phosphorus- P_2O_5 or $Ca_3(PO_4)_2$, Method C-Spectrophotometric Method.

(E) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method A-Volumetric Method.

(F) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method B-Gravimetric Quimociac Method.

(G) Section XI, Methods of Analysis For Phosphoric Acid,
Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method C-Spectrophotometric Method.

(4) To comply with § 63.625(f)(1) or (2) (see SC E.18.), the owner or operator shall use the monitoring systems in § 63.625(c) (see SC E.17.) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.625(f)(1) or (2) (see SC E.18.).
[40 CFR 63.626(c)]

E.13. The visible emissions test shall be conducted by a certified observer and be a minimum of 60 minutes in duration. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.
[Rules 62-297.310(4)(a), and 62-4.070, F.A.C.]

E.14. If fuel oil of any grade (No. 2 to No. 6, inclusive) has been used in the dryer for a sum total of more than 400 hours from the previous compliance test, then compliance testing shall be conducted while firing fuel oil. If a test is conducted while firing natural gas, and in the 12 month period following the test, oil of any grade is burned for a sum total of more than 400 hours, then an additional visible emission test per Condition E.5 shall be conducted, while burning oil in the dryer, within 30 days of having exceeded the 400th hour oil burning limit. A compliance test submitted using a lower grade number fuel oil than grade No. 6 fuel oil, will automatically amend the dryer to allow subsequent operation on less than or equal grade numbers than that lower grade number fuel oil.

[Rules 62-297.310(7), and 62-4.070(3), F.A.C.]

E.15. If the Department of Environmental Protection has reason to believe 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.]

E.16. This emission unit is also subject to the requirements of Alternate Sampling Plan, 05-L-AP, dated December 20, 2005.

[Alternate Sampling Plan, 05-L-AP, dated December 20, 2005]

Monitoring of Operations

E.17. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

(1) A monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range.

(2) A monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ± 5 percent over its operating range.

[40 CFR 63.625(c)]

E.18. Following the date on which the performance test required in § 63.626 (see SC E.12.) is completed, the owner or operator of an existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (f)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ± 20 percent of the baseline average value determined as a requirement of § 63.626(c)(4) (see SC E.12.). The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ± 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.626(c)(4) (see SC E.12.). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.626(c)(4) (see SC E.12.). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline average values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable

ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.624 (See SC E.4) shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.625(f)]

Recordkeeping and Reporting Requirements

E.19. Each owner or operator of an existing granular triple superphosphate process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 63.625(a) and then by proceeding according to §63.626(c)(3) (see SC E.12.).

[40 CFR 63.625(b)]

E.20. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 and Rule 62-297.310(8) as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9. The 45-day test reporting requirements are more stringent in Rule 62-297.310(8), F.A.C.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10, and the owner or operator shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. with a full written report on the malfunctions being submitted in a quarterly report.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

{Permitting Note: The conditions of 40 CFR 63.627(c) take precedence over 62-210.700(6) and 62-297.310(8)}

[40 CFR 63.627 (b) and (c), Rules 62-210.700(6) and 62-297.310(8), F.A.C.]

E.21. A record log shall be established and maintained for all fuel fired in the GTSP Plant dryer. The log shall include, at a minimum, the quantity of natural gas and fuel oil utilized in the dryer and the sulfur content of the fuel oil delivered which is utilized in the dryer (example: Fuel oil delivery invoices indicating sulfur content are acceptable). [Applicant Request For Natural Gas, 09/18/95, AO53-235041 amendment, dated 6/1/95 and Rules 62-4.070(3), and 62-213.440(b)2.b., F.A.C.]

Applicability of general provisions.

E.22. The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart. The facility is subject to the applicable conditions of Subpart A as they apply to the existing GTSP plant.

[40 CFR 63.628]]

Miscellaneous requirements.

E.23. This emission unit is subject to specific requirements of 40 CFR 63, Subpart BB, Appendix A to Subpart BB – Applicability to General Provisions to Subpart BB, and Compliance Plan CP-1. The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB upon the effective date in the final promulgated rule. Subsequently, this permit will be reopened to incorporate any applicable updates in accordance with Rule 62-213.430(4), F.A.C. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:

- 1) Must comply with all conditions of Compliance Plan CP-1,
- 2) Must comply with all applicable requirements of Subparts A and BB,
- 3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,
- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Subparts A and BB,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63- Subpart A, 40 CFR 63- Subpart BB, and Compliance Plan, CP-1]

E.24. Definitions- Terms used in this subpart are defined in the Clean Air Act, in § 63.2, or in this section as follows:

Equivalent P₂O₅ feed means the quantity of phosphorus, expressed as phosphorous pentoxide, fed to the process.

Exceedance means a departure from an indicator range established for monitoring under this subpart, consistent with any averaging period specified for averaging the results of the monitoring.

Granular triple superphosphate process line means any process line, not including storage buildings, manufacturing granular triple superphosphate by reacting phosphate rock with phosphoric acid.

Total fluorides means elemental fluorine and all fluoride compounds, including the HAP hydrogen fluoride, as measured by reference methods specified in 40 CFR Part 60, Appendix A, Method 13 A or B, or by equivalent or alternative methods approved by the Administrator pursuant to §63.7(f).

[40 CFR 63.630]

CAM Requirements

E.25. This emissions unit is subject to the 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; and, 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

- | | |
|------|--|
| -024 | GTSP East Storage Building - North scrubber system |
| -025 | GTSP East Storage Building - South scrubber system |

The amount of process input rate to the Granular Triple Super Phosphate (GTSP) East Storage Building is 140 tons per hour of GTSP from the GTSP production plant, and the process output rate from the GTSP East Storage Building is 7,500 tons per day to railcar or truck loadout.

Two scrubber systems control emissions generated at the East Storage Building. A North scrubber system controls emissions generated in the northern part of the East Storage Building and a South scrubber system controls emissions generated in the southern part of the East Storage Building. The scrubber systems are similar in construction and operation. Each scrubber system consists of collector ducts alongside the Building and two wet cyclonic scrubbers in parallel exhausting to a common stack. The stack gas flow rate of the North scrubber system is approximately 102,000 acfm and the stack gas flow rate of the South scrubber system is approximately 123,000 acfm. Both scrubber systems use process water as the scrubbing liquid.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, F.A.C., RACT Particulate Matter; Rule 62-296.403, F.A.C., Phosphate Processing; and 40 CFR 63, Subpart BB, Phosphate Fertilizer Production. CAM does not apply. **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 following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

F.1. Capacity.

- a. The process input rate to the GTSP East Storage Building shall not exceed 140 tons per hour of GTSP (see Condition E.1.).
- b. The process output rate from the GTSP East Storage Building shall not exceed 7,500 tons per day of GTSP.

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), Requested by Applicant, April 20, 1995]

Emission Limitations and Standards

F.2. Particulate matter emissions from both scrubber systems, combined, shall not exceed any of the following limits:

- a. 40.1 pounds per hour for a total GTSP product weight rate greater than 190 tons per hour.
- b. For a total GTSP product weight rate equal to or less than 190 tons per hour, the particulate matter emission rate is, E:
Where: E = pounds per hour, and P = total GTSP rate, tons per hour,
 - (1) $E = (3.59) P^{0.62}$, where P is less than or equal to 30 tons per hour, or
 - (2) $E = (17.31) P^{0.16}$, where P is greater than 30 tons per hour.
- c. 175.6 tons per year.

This particulate matter emission rate limitation qualifies the facility for the PM-RACT exemption per Rule 62-296.700(2)(b), F.A.C.

[Requested by applicant, Based on the 4/29/83 screen model memorandum for PM-RACT exemption, Rule 62-296.320(4)(a)2, F.A.C.]

F.3. Granular triple superphosphate storage building.

(1) On and after the date on which the performance test required to be conducted by §§ 63.7 and 63.626 (see SC F.9.) is required to be completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 0.250 grams/hr/metric ton of equivalent P_2O_5 stored (5.0×10^{-4} lb/hr/ton of equivalent P_2O_5 stored).

(2) No owner or operator subject to the provisions of this subpart shall ship fresh granular triple superphosphate from an affected facility.

(3) If the owner operator does not meet the conditions (1) and (2) of this Specific condition, Fluoride emissions from both scrubber systems, the North and the South scrubber system, shall not exceed 7.8 pounds per hour and 34.2 tons per year.

[40 CFR 63.622(c), Rule 62-296.403(2) and application dated 7/23/93.]

F.4. Visible emissions from the East Storage Building operations shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b), F.A.C.]

F.5. 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 but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

F.6. 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.]

F.7. On or after the date on which the performance test required to be conducted by §§ 63.7 and 63.626 (see SC F.9.) is required to be completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of § 63.625(f)(1) or (2) (See SC E.18.).

[40 CFR 63.624]

Test Methods and Procedures

F.8. On or before the applicable compliance date in § 63.630 and once every federal fiscal year thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section. The owner or operator must test the North scrubber system stack and the South scrubber system stack for particulate matter emissions, fluorides emissions, and visible emissions annually. The testing of each stack shall occur simultaneously, or within one consecutive five day period. If two tests are performed, the second series of test runs shall

begin no later than five days after completion of the first series of test runs, and the lower of each production rate recorded during the tests shall be used for establishing allowable rates.
[40 CFR 63.626(a)(1), Rules 62-297.310(7), 62-297.310(1) and 62-297.310(8), F.A.C.]

F.9. In conducting performance tests, each owner or operator of an affected source shall use Methods 1, 2, 4, 5, 9 and 13A or 13B as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f). The EPA Method 9 test shall be conducted by a certified observer and be a minimum of 60 minutes in duration. Each owner or operator of an existing granular triple superphosphate storage building shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 as follows:

(1) The owner or operator shall conduct performance tests only when the following quantities of product are being cured or stored in the facility.

(i) Total granular triple superphosphate is at least 10 percent of the building capacity, and

(ii) Fresh granular triple superphosphate is at least six percent of the total amount of granular triple superphosphate, or

(iii) If the provision in paragraph (d)(1)(ii) of this sub-section exceeds production capabilities for fresh granular triple superphosphate, fresh granular triple superphosphate is equal to at least 5 days maximum production.

(2) [reserved]

(3) The owner or operator shall determine compliance with the total fluorides standard in §§ 63.622 and 63.623 as follows:

(i) The emission rate (E) of total fluorides shall be computed for each run using the following equation:

$$E = \left(\sum_{i=1}^N C_{si} Q_{sdi} \right) / (PK)$$

where:

E = emission rate of total fluorides, g/hr/metric ton (lb/hr/ton) of equivalent P_2O_5 stored.

C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).

Q_{sdi} = volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).

N = number of emission points in the affected facility.

P = equivalent P_2O_5 stored, metric tons (tons).

K = conversion factor, 1000 mg/g (453,600 mg/lb).

(ii) Method 13A or 13B (40 CFR part 60, appendix A) shall be used to determine the total fluorides concentration (C_{si}) and volumetric flow rate (Q_{sdi}) of the effluent gas from each of the emission points. If Method 13B is used, the fusion of the filtered material described in section 7.3.1.2 and the distillation of suitable aliquots of containers 1 and 2, described in Sections 7.3.3 and 7.3.4 in Method 13 A, may be omitted. The sampling time and sample volume for each run shall be at least one hour and 0.85 dscm (30 dscf).

(iii) The equivalent P_2O_5 feed rate (P) shall be computed using the following equation:

$$P = M_p R_p$$

where:

M_p = amount of product in storage, metric ton (ton).

R_p = P_2O_5 content of product in storage, weight fraction.

(iv) The accountability system described in § 63.625(d) and (e) shall be used to determine the amount of product (M_p) in storage.

(v) The P_2O_5 content (R_p) of the product stored shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Book of Methods Used and Adopted By The Association Of Florida Phosphate Chemists, Seventh Edition 1991, where applicable:

(A) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method A-Volumetric Method.

(B) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method B-Gravimetric Quimociac Method.

(C) Section XI, Methods of Analysis For Phosphoric Acid, Superphosphate, Triple superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus- P_2O_5 , Method C-Spectrophotometric Method, or,

(vi) The P_2O_5 content (R_p) of the product stored shall be determined using as appropriate the following methods (incorporated by reference- see 40 CFR 63.14) specified in the Official Methods of Analysis of AOAC International, sixteenth Edition, 1995, where applicable:

(A) AOAC Official Method 957.02 Phosphorus (Total) In Fertilizers, Preparation of Sample.

(B) AOAC Official Method 929.01 Sampling of Solid Fertilizers.

(C) AOAC Official Method 929.02 Preparation of Fertilizer Sample.

(D) AOAC Official Method 978.01 Phosphorus (Total) In Fertilizers, Automated Method.

(E) AOAC Official Method 969.02 Phosphorus (Total) In Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method.

(F) AOAC Official Method 962.02 Phosphorus (Total) In Fertilizers, Gravimetric Quinolinium Molybdophosphate Method.

(G) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizer, Spectrophotometric Molybdovanadophosphate Method.

(4) To comply with § 63.625(f)(1) or (2) (See SC E.18), the owner or operator shall use the monitoring systems described in § 63.625(c) (see SC E.16.) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the total fluoride runs. The arithmetic averages of the three runs shall be used as the baseline average values for the purposes of § 63.625(f)(1) or (2) (See SC E.18.).

{Permitting Note- The conditions of 40 CFR 63.626 take precedence over the conditions referenced in 62-297, F.A.C.}

[40 CFR 63.626(b) and (d) and Rule 62-297, F.A.C.]

F.10. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9. Test notification must be in accordance with § 63.9(e). This test requirement is more stringent than the state requirement of 15-day notification in 62-297.310, F.A.C.

[40 CFR 63.607(a)]

F.11. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 and Rule 62.297.310(8) as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance

status required in § 63.9. The 45-day test reporting requirements are more stringent in Rule 62-297.310(8), F.A.C.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10, and the owner or operator shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. with a full written report on the malfunctions being submitted in a quarterly report.

(3) Summary report. If the total duration of control system exceedances for the reporting period is less than 1 percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in § 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.

(4) If the total duration of control system operating parameter exceedances for the reporting period is 1 percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.
{Permitting Note: The conditions of 40 CFR 63.627(c) take precedence over 62-210.700(6) and 62-297.310(8)}
[40 CFR 63.627 (b) and (c), Rules 62-210.700(6) and 62-297.310(8), F.A.C.]

F.12. If the Department of Environmental Protection has reason to believe 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.]

F.13. This emission unit is also subject to the requirements of Alternate Sampling Plan, 05-L-AP, dated December 20, 2005.
[Alternate Sampling Plan, 05-L-AP, dated December 20, 2005]

Monitoring of Operations

F.14. The permittee shall install, calibrate, maintain, and operate monitoring devices which measure the exhaust fan amperages for both the North and South scrubber systems as applicable to MACT and alternate sampling plan.
[Rule 62-4.070(3), F.A.C.]

F.15. The owner or operator of any granular triple superphosphate storage building subject to the provisions of this subpart shall maintain an accurate account of granular triple superphosphate in storage to permit the determination of the amount of equivalent P_2O_5 stored.
[40 CFR 63.625(d)]

F.16. Each owner or operator of an existing granular triple superphosphate storage building subject to the provisions of this subpart shall maintain a daily record of total equivalent P_2O_5

stored by multiplying the percentage P_2O_5 content, as determined by § 63.626(d)(3) (see SC F.9.), times the total mass of granular triple superphosphate stored.

[40 CFR 63.625(e)(1)]

F.17. The owner or operator of any granular triple superphosphate storage building subject to the provisions of this subpart shall develop for approval by the Administrator a site-specific methodology including sufficient recordkeeping for the purposes of demonstrating compliance with § 63.622(c)(2), as applicable.

[40 CFR 63.625(e)(2)]

F.18. Following the date on which the performance test required in § 63.626 (see SC F.9.) is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (f)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ± 20 percent of the baseline average value determined as a requirement of § 63.626(c)(4) or (d)(4) (see SC F.9.). The Administrator retains the right to reduce the ± 20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ± 10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. The baseline average values used for compliance shall be based on the values determined during the most recent performance test. The new baseline average value shall be effective on the date following the performance test.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges of baseline average values for the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in this subpart and established in the manner required in § 63.626(c)(4) or (d)(4) (see SC F.9.). As an alternative, the owner or operator can establish the allowable ranges of baseline average values using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in § 63.626(c)(4) or (d)(4) (see SC F.9.). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges of baseline average values developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges of baseline average values. When a source using the methodology of this paragraph is retested, the owner operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters from previous tests. Any new allowable ranges of baseline average values resulting from the most recent performance test shall be effective on the date following the retest. Until changes to allowable ranges of baseline average values are approved by the Administrator, the allowable ranges for use in § 63.624 (See SC F.7.) shall be based upon the range of baseline average values proposed for approval.

[40 CFR 63.625(f)]

Recordkeeping and Reporting Requirements

F.19. The permittee shall establish and maintain a record log for the GTSP East Storage Building. The record log shall include, at a minimum:

- a. a reference to loadout records to verify that the 7500 tons per day maximum GTSP production output rate, required by Condition F.1, is not exceeded,
- b. a reference to loading records to verify that the 140 tons per hour maximum GTSP production input rate, as stated in Condition F.1, is not exceeded.

The permittee may substitute continuous monitoring, strip chart recordings and/or electronic media recording in lieu of the required manual recordings.

[Rules 62-4.070(3), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.]

Applicability of general provisions.

F.20. The requirements of the general provisions in subpart A of this part that are applicable to the owner or operator subject to the requirements of this subpart are shown in appendix A to this subpart. The facility is subject to the applicable conditions of Subpart A as they apply to the existing GTSP storage building.

[40 CFR 63.628]

Miscellaneous requirements.

F.21. The Administrator retains the authority to approve site-specific test plans for uncontrolled granular triple superphosphate storage buildings developed pursuant to § 63.7(c)(2)(i).

[40 CFR 63.629]

F.22. This emission unit is subject to specific requirements of 40 CFR 63, Subpart BB, Appendix A to Subpart BB – Applicability to General Provisions to Subpart BB, and Compliance Plan CP-1. The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB upon the effective date in the final promulgated rule. Subsequently, this permit will be reopened to incorporate any applicable updates in accordance with Rule 62-213.430(4), F.A.C. To establish operating parameters for this emissions unit, the owner or operator must comply and demonstrate with the following:

- 1) Must comply with all conditions of Compliance Plan CP-1,
- 2) Must comply with all applicable requirements of Subparts A and BB,
- 3) Specifically notify the department the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,
- 4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,
- 5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,
- 6) All tests shall be submitted to the Department in accordance with Subparts A and BB,
- 7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63- Subpart A, 40 CFR 63- Subpart BB, and Compliance Plan, CP-1]

F.23. Definitions- Terms used in this subpart are defined in the Clean Air Act, in § 63.2, or in this section as follows:

Equivalent P_2O_5 stored means the quantity of phosphorus, expressed as phosphorus pentoxide, being cured or stored in the affected facility.

Exceedance means a departure from an indicator range established for monitoring under this subpart, consistent with any averaging period specified for averaging the results of the monitoring.

Fresh granular triple superphosphate means granular triple superphosphate produced within the preceding 72 hours.

Granular triple superphosphate storage building means any building curing or storing fresh granular triple superphosphate.

Total fluorides means elemental fluorine and all fluoride compounds, including the HAP hydrogen fluoride, as measured by reference methods specified in 40 CFR Part 60, Appendix A, Method 13 A or B, or by equivalent or alternative methods approved by the Administrator pursuant to §63.7(f).
[40 CFR 63.621]

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

E.U. ID

No.

Brief Description

-026

GTSP Rock Hopper Bin

The phosphate rock storage bin at the GTSP plant operates automatically to maintain sufficient rock supply. Material is pneumatically conveyed to the storage bin at a rate of 70 tons per hour. Particulate matter emissions are controlled by a dust collector, with a design flow rate of 2400 ACFM. Material collected by the dust collector is returned to the storage bin.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.700, F.A.C., RACT Particulate Matter. CAM does not apply.}

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

Essential Potential to Emit (PTE) Parameters

G.1. Capacity. The transfer rate shall not exceed 70.0 tons per hour.
[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE)]

Emission Limitations and Standards

G.2. Visible emissions from the GTSP rock storage bin baghouse exhaust, and conveying equipment, shall not be equal to or greater than 20% opacity.
[Rule 62-296.320(4)(b), F.A.C.]

G.3. The maximum allowable emission rate of particulate matter from the GTSP rock storage bin baghouse exhaust shall not exceed 22.5 pounds per hour. [Requested by applicant on October 28, 1993 in order for the emission unit to be considered a minor source (allowable particulate emission rate less than 100 tons per year), Rule 62-4.070(3), F.A.C.]

G.4. 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 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.]

G.5. 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.].

G.6. In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.].

Test Methods and Procedures

G.7. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department in writing at least 15 days prior to the date on which each formal compliance test

is to begin. The notification will include the date, the time, and the place of each such test, and the test 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.].

G.8. Test for visible emissions per Condition G.2. annually. Testing at conditions that are not representative of actual operating conditions may invalidate the test.
[Rules 62-297.310(7), and 62-297.310(8), F.A.C.]

G.9. Test for particulate matter emissions per Condition G.3, on or during the sixty (60) day period prior to expiration date of this permit. Testing at conditions that are not representative of actual operating conditions may invalidate the test.
[Rules 17-297.310(7), and 17-297.310(8), F.A.C.]

G.10. Compliance with the emission limitations of Conditions G.2 and G.3, shall be demonstrated using EPA Methods 1, 2, 4, 5 and 9, contained in 40 CFR 60, Appendix A, adopted by reference in Chapter 62-297, F.A.C. The EPA Method 9 test shall be conducted by a certified observer and be a minimum of 60 minutes in duration.
[Rules 62-297.310(4)(a), F.A.C.]

G.11. If the Department of Environmental Protection has reason to believe 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.]

Monitoring of Operations

G.12. In order to demonstrate compliance with Rule 62-210.650, the permittee shall record the pressure drop across the baghouse daily.
[Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

G.13. In order to document compliance with the rate limitation of G.1. the permittee shall maintain daily records of the amount of material processed and total hours of process operations.*

NOTE: The transfer rate for the GTSP Rock Hopper Bin is dependent on the GTSP production rate. The recording of the total hours of process operations for the GTSP Plant should suffice for the GTSP Rock Hopper Bin.

*Engineering estimates may be used to estimate these parameters.
[Rule 62-4.070(3), F.A.C.]

G.14. 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 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 a minimum, the "Project", "Facility ID" and "Point ID"), 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.]

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-030	Molten Sulfur Storage - (East) Tank 1 - Vent 1
-031	Molten Sulfur Storage - (East) Tank 1 - Vent 2
-032	Molten Sulfur Storage - (East) Tank 1 - Vent 3
-033	Molten Sulfur Storage - (East) Tank 1 - Vent 4
-035	Molten Sulfur Storage - (West) Tank 2 - Vent 1
-036	Molten Sulfur Storage - (West) Tank 2 - Vent 2
-037	Molten Sulfur Storage - (West) Tank 2 - Vent 3
-038	Molten Sulfur Storage - (West) Tank 2 - Vent 4
-039	Molten Sulfur Storage - (West) Tank 2 - Vent 5
-040	Molten Sulfur Truck Pit - East Vent with Fan
-041	Molten Sulfur Truck Pit - East Vent w/out Fan
-042	Molten Sulfur Truck Pit - West Vent with Fan
-043	Molten Sulfur Truck Pit - West Vent w/out Fan
-050	Molten Sulfur Transfer Pit with two vents

The molten sulfur storage and handling system comprises of the unloading, transfer and storage of molten sulfur delivered to the plant by trucks. The system is permitted for a throughput of 2,300 tons per day and 725,000 tons per year. The system consists of two 1,050 short ton storage tanks (east and west), a 670 short ton truck unloading pit, and associated transfer pumps and piping. Molten sulfur from the truck receiving pit can be transferred to either the east or west storage tank or to the sulfuric acid plants. Truck unloading into the transfer pit is allowed when the truck receiving pits cannot be used for any reason.

The Molten Sulfur Pit has a capacity of 250 tons. Molten Sulfur is unloaded into pits via truck. The material is either pumped into storage tanks or into the transfer pit. The transfer pit is used to pump molten sulfur to the sulfuric acid plant or back into the storage tanks. The current pit has two sections. The transfer section is being replaced by the new molten sulfur transfer pit. The existing transfer pit will no longer be used once the new pit is in operation. The existing truck unloading section of the pit will continue to be used. The West Vent shall be Emission Point No. 1 and the East vent shall be Emission Point No.2.

{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. CAM does not apply.}

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

Essential Potential to Emit (PTE) Parameters

H.1. Capacity. The maximum molten sulfur throughput rate shall neither exceed 2,300 tons per day (calculated as a 5 day rolling average), nor 725,000 tons per year (based on a combined acid production capacity of 6,000 TPD of 100% sulfuric acid from Sulfuric Acid Plant Nos. 10 and 11).

[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions - (PTE), 1050055-010-AC/PSD-FL-235].

H.2. Hours of Operation. This Molten Sulfur Transfer Pit is permitted to operate 8,760 hours per 12 month consecutive period.

[Requested by permittee in application dated April 15, 2003, Air Construction Permit 1050055-013-AC]

Emission Limitations and Standards

H.3. Visible emissions from any emission point in the molten sulfur handling and storage system shall not exceed 20% opacity (six minute average) and be a minimum of 30 minutes in duration.

[Rule 62-296.411(1)(g), F.A.C.]

H.4. For emission inventory and PSD purposes, the estimated emissions from the sources in the molten sulfur storage and handling system are:

Pollutant Source	PM/PM ₁₀		Sulf. PM		SO ₂		TRS/H ₂ S		VOC	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
East Tank	0.56	1.55	0.28	0.78	0.72	1.99	0.42	1.18	0.51	1.42
West Tank	0.56	1.55	0.28	0.78	0.72	1.99	0.42	1.18	0.51	1.42
Truck Pit	1.02	4.51	0.51	2.25	1.32	5.79	0.78	3.41	0.94	4.12

[Construction Permit 1050055-010-AC/PSD-FL-235].

H.5. 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 but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

H.6. 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. and Air Construction Permit 1050055-013-AC]].

H.7. In case of excess emissions resulting from malfunctions, the permittee shall notify the Air Compliance Section of the Southwest District Office of the Department of Environmental Protection in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

[Rule 62-210.700(6), F.A.C.].

H.8. 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 moveable unloading arms and stationary pipes shall seat effectively around the entire circumference to minimize spillage.

[Rule 62-296.411(1)(a), F.A.C., Air Construction Permit 1050055-013-AC]

H.9. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks 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 noncorrosible drip pans or other secondary containment, positioned to collect spills, that are adequate to contain amounts of sulfur that may escape during routine disconnect, reconnection or operation of the piping system.

[Rule 62-296.411(1)(b), F.A.C., Air Construction Permit 1050055-013-AC]

H.10. 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., Air Construction Permit 1050055-013-AC]

H.11. All vent surfaces shall be cleaned monthly to remove captured particulates.

[Rule 62-296.411(1)(e), F.A.C., Air Construction Permit 1050055-013-AC]

H.12. Objectionable Odor. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants from this plant which cause or contribute to an objectionable odor. Objectionable odor is defined as "Any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance."

[Rules 62-296.320(2) and 62-210.200, Definitions-(Objectionable Odor), F.A.C., Air Construction Permit 1050055-013-AC]

Test Methods and Procedures

H.13. The permittee shall notify the Air Compliance Section of the Southwest District Office of the Department in writing at least 15 days prior to the date on which each formal compliance test is to begin. The notification will include the date, the time, and the place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted.

[Rules 62-297.310(7)(a)9, 62-209.500(5), F.A.C., and Air Construction Permit 1050055-013-AC].

H.14. All the emission points in the molten sulfur handling and storage system shall be tested for visible emissions on, or during the 180 day period prior to the expiration date of this permit.

[Rules 62-297.310(7) and 62-297.310(8), F.A.C.].

H.15. Compliance with the visible emission limitation of Condition H.2. shall be determined using DEP Method 9. Compliance shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The visible emissions tests shall be conducted during conditions that would be expected to produce the highest opacity. The tests for the vents of the storage tanks and sulfur pits shall be conducted while the tanks are being filled (filling does not have to be continuous during the entire test. Visible emissions tests shall be conducted at each vent of the two sulfur receiving pits and at each vent of the two sulfur storage tanks. The unloading/transfer rates and a description of the unloading operations during the test shall be included with the test results. Failure to submit the actual operating conditions may invalidate the test and fail to provide reasonable assurance of compliance. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62- 297, F.A.C.

[Construction Permit No. AC53-201152, Air Construction Permit 1050055-013-AC, Rules 62-4.070(3), and 62-297.310, 62-297.401, 62-296.411, F.A.C.]

H.16. Test Requirement-Production Rate. Testing of emissions to show compliance shall be conducted under normal operating conditions while the pit is transferring sulfur. The actual throughput rate (in tons/hour) for the test period and an explanation how the rate was determined shall be included in the test report. Failure to submit the actual transfer rate for the test period

and a copy of the daily log for the test day in the test report may invalidate the test and fail to provide reasonable assurance of compliance.

[Rule 62-297.310(2), and 62-4.070(3), F.A.C., Air Construction Permit 1050055-013-AC]

H.16. Other Tests. If the Department of Environmental Protection has reason to believe that any applicable emission standard is being violated, the Department may require the permittee to conduct compliance tests which identify the nature and quantity of emissions and to provide a report on the results of the tests.

[Rule 62-297.310(7)(b), F.A.C., Air Construction Permit 1050055-013-AC]

Monitoring and Recordkeeping Requirements

H.17. Recordkeeping. In order to document compliance with Specific Conditions H.1., H.2., and H.6., the permittee shall keep the following records at a minimum:

Facility ID number.

Month, Day, and Year.

Throughput rate for the Molten Sulfur System (as measured by the amount received) in tons/day. This will be calculated by the total amount of molten sulfur received in a day.

A consecutive 5 day average (most recent 5 days) of the throughput rate (as measured by the amount received) in tons/day will be maintained for compliance with the annual limit.

Monthly total sulfur received (tons/month).

A consecutive 12 month period (most recent 12 months) of the throughput rate (as measured by the amount received) in tons/year will be maintained for compliance with the annual limit.

The date the vent surfaces were cleaned.

The daily recordkeeping log shall be completed by the end of the following week. The monthly recordkeeping log shall be completed by the end of the week following the end of the preceding month. The above records shall be maintained for a minimum of the most recent five (5) year period and made available to the Department upon request.

[Rules 62-213.440(1) and 62-4.070(3), F.A.C., Air Construction Permit 1050055-013-AC]

H.18. 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 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 a minimum, the "Project", "Facility ID" and "Point ID"), 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.]

Recordkeeping-Spilled Molten Sulfur.

H.19. Records of spills outside of the containment areas and of collection and disposal of spilled sulfur.

[Rule 62-296.411(1)(f), F.A.C., Air Construction Permit 1050055-013-AC]

H.20. Records of collection and disposal of spilled molten sulfur inside of the containment area including records of weekly and monthly cleaning.

[Rule 62-296.411(1)(d), F.A.C., Air Construction Permit 1050055-013-AC]

H.21. Such records shall be retained for a minimum of five (5) years and shall be available for inspection by the Department upon request.

[Rules 62-213.440(1), and 62-4.070(3), F.A.C., Air Construction Permit 1050055-013-AC]

Reasonable Assurances

H.22. The permittee shall implement the necessary recordkeeping, maintenance, and operational procedures to minimize emissions from the molten sulfur system pursuant to the applicable requirements of Rule 62-296.411(1), F.A.C., "Molten Sulfur Storage and Handling Facilities".

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

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-048	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.) CAM does not apply.}

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

I.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).

Friday, Barbara

From: Turley, Charles D - New Wales [David.Turley@mosaicco.com]
Sent: Tuesday, July 18, 2006 8:45 AM
Subject: Read: FINAL Title V Permit Renewal No.: 1050055-014-AV - Mosaic Fertilizer, LLC - South Pierce Facility

Attachments: ATT598154.txt



ATT598154.txt
(307 B)

Your message

To: jkoogler@kooglerassociates.com; praval@kooglerassociates.com;
Ahrens, Dean - New Wales; Turley, Charles D - New Wales; Waters, Jason
Cc: Bull, Robert
Subject: FINAL Title V Permit Renewal No.: 1050055-014-AV - Mosaic Fertilizer, LLC -
South Pierce Facility
Sent: Tue, 18 Jul 2006 09:38:17 -0400

was read on Tue, 18 Jul 2006 09:44:41 -0400

Friday, Barbara

From: System Administrator
To: praval@kooglerassociates.com; jkoogler@kooglerassociates.com
Sent: Tuesday, July 18, 2006 8:44 AM
Subject: Delivered:Mail System Delivery Report

Your message

To: jkoogler@kooglerassociates.com; praval@kooglerassociates.com; Dean.Ahrens@mosaicco.com; David.Turley@mosaicco.com; Waters, Jason
Cc: Bull, Robert
Subject: FINAL Title V Permit Renewal No.: 1050055-014-AV - Mosaic Fertilizer, LLC - South Pierce Facility
Sent: 7/18/2006 8:38 AM

was delivered to the following recipient(s):

praval@kooglerassociates.com on 7/18/2006 8:43 AM
jkoogler@kooglerassociates.com on 7/18/2006 8:43 AM

Friday, Barbara

From: Exchange Administrator
Sent: Tuesday, July 18, 2006 8:44 AM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)

Attachments: ATT117778.txt; Untitled Attachment



ATT117778.txt Untitled Attachment
(376 B)



This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

Dean.Ahrens@mosaicco.com
David.Turley@mosaicco.com

MEMORANDUM

TO: Joseph Kahn

THRU: Trina Vielhauer 
Jeff Koerner 

FROM: Bobby Bull

DATE: July 12, 2006

SUBJECT: FINAL Permit No. 1050055-014-AV
Mosaic Fertilizer, LLC
South Pierce Facility

Attached for approval and signature is a final air permit renewal for the South Pierce Facility. This permit renews the Title V Air Operation Permit, incorporates construction permits, No. 1050055-013-AC and No. 1050055-015-AC, incorporates the Compliance Assurance Monitoring (CAM) Plan, incorporates a Compliance Plan (CP-1), and incorporates Alternate Sampling Plans 05-J-AP and 05-L-AP.

Comments were received from the applicant on the draft permit published on February 21, 2006, and were incorporated into the proposed permit. No comments were received from EPA on the proposed permit clerked on May 18, 2006. Day 55 is July 12, 2006.

I recommend your approval and signature.

Attachment

TV/rlb