

Friday, Barbara

To: 'jkoogler@kooglerassociates.com'; 'Pradeep Raval'; Phil.Steadham@mosaicco.com; Waters, Jason

Cc: Bull, Robert

Subject: DRAFT Title V Permit Renewal No.: 1050055-014-AV/DRAFT Air Construction Permit No.:
1050055-015-AC - Mosaic Phosphates Co.-South Pierce Plant

Attached for your records are two zip files that contain the DRAFT Title V Permit Renewal and DRAFT Air Construction Permit.

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

Barbara J. Friday
Planner II
Bureau of Air Regulation
(850)921-9524
Barbara.Friday@dep.state.fl.us

3/22/2005



Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

P.E. Certification Statement

Permittee: Mosaic Phosphates Company **DRAFT Permit No.:** 1050055-014AV
South Pierce Facility

Project: Title V Air Operation Permit Renewal

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; a purified monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; a ball mill grinding system; three MAP/DAP storage silos; MAP/DAP Plant -- bagging machine; MAP/DAP Plant -- bulk truck loading; MAP/DAP Plant -- bulk railcar loading; 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. Based on the Title V Air Operation Permit Renewal application received September 29, 2003, it was determined that this facility is a major source of hazardous air pollutants, specifically due to the estimation of emissions of hydrogen fluoride.

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

This DRAFT permit was prepared by Mr. Bobby Bull under my direct supervision.



3/2/05
Date

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0144
Fax: 850/922-6979

"More Protection, Less Process"



Jeb Bush
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Department of Environmental Protection

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

Colleen M. Castille
Secretary

P.E. Certification Statement

Permittee: Mosaic Phosphates Company **Draft Permit No.:** 1050055-015 AC
South Pierce Facility

Project: Deletion of Emissions Units and Removal of Obsolete Permit Conditions

This action acknowledges the deletion of ten emissions units from the current facility. The emissions units deleted are the Purified Monoammonium /Diammonium (MAP/DAP) Plant, the Purified MAP/DAP Plant Silo No.3, the Purified MAP/DAP Plant Bagging Machine, the Purified MAP/DAP Plant Bulk Truck Loading, the Purified MAP/DAP Plant Silo No.2, the Purified MAP/DAP Plant Silo No.1, the Purified MAP/DAP Plant Bulk Railcar Loading, the Vent 5, Molten Sulfur Rail Pit, North Vent, the Molten Sulfur Rail Pit, North Vent, and the Molten Sulfur Rail Pit, South Vent.

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

This Draft permit was prepared by Mr. Bobby Bull under my direct supervision.



3/2/05
Date

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0144
Fax: 850/922-6979

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U.S. Postal Service
CERTIFIED MAIL RECEIPT
(Domestic Mail-Only; No Insurance Coverage Provided)

OFFICIAL USE
 Jeffrey A. Golwitzer, Plant Manager

7000 2870 0000 7028 0207

| | |
|---|-----------|
| Postage | \$ |
| Certified Fee | |
| Return Receipt Fee (Endorsement Required) | |
| Restricted Delivery Fee (Endorsement Required) | |
| Total Postage & Fees | \$ |

Postmark
Here

Sent To
 Jeffrey A. Golwitzer, Plant Manager
 Street, Apt. No., or PO Box No.
 7450 Highway 630
 Mulberry, Florida 33860

PS Form 3800, May 2000

See Reverse for Instructions

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

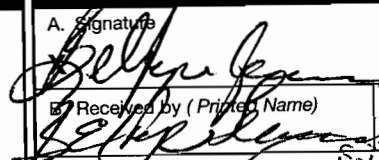
Jeffrey A. Golwitzer
 Plant Manager
 Mosaic Phosphates Company
 7450 Highway 630
 Mulberry, Florida 33860

2. Article Number

(Transfer from service label)

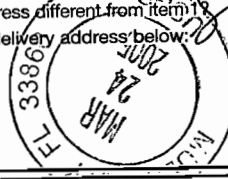
7000 2870 0000 7028 0207

COMPLETE THIS SECTION ON DELIVERY

A. Signature  ☐ Agent ☒ Addressee

☒ Received by (Printed Name) Jeffrey A. Golwitzer C. Date of Delivery 3-24-05

D. Is delivery address different from item 1? ☒ Yes ☐ No
 If YES, enter delivery address below:



3. Service Type

- ☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

UNITED STATES POSTAL SERVICE



First-Class Mail 3
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box.

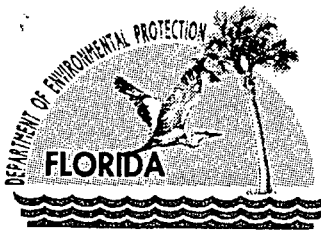
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR RESOURCES MANAGEMENT
BUREAU OF AIR REGULATION - TITLE V
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

M& 5505

RECEIVED
MAR 28 2005
REC
BUREAU OF AIR REGULATION
MAR 28 2005

BUREAU OF A





Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

March 21, 2005

CERTIFIED MAIL - Return Receipt Requested

Jeffrey A. Golwitzer
Plant Manager
Mosaic Phosphates Company
7450 Highway 630
Mulberry, Florida 33860

Re: DRAFT Title V Air Operation Permit Renewal Project No.: 1050055-014-AV
Draft Air Construction Permit Project No.: 1050055-015-AC
South Pierce Plant

Dear Mr. Golwitzer:

One copy of the Technical Evaluation and Preliminary Determination, the combined Public Notice, the Draft air construction permit, and the DRAFT Title V air operation permit renewal for the South Pierce Plant located at 7450 Highway 630 in Polk County, is enclosed. The permitting authority's "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" and the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" are also included.

An electronic version of the DRAFT Title V Air Operation Permit Renewal has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

["http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch_ltd.asp"](http://www.dep.state.fl.us/air/permitting/airpermits/AirSearch_ltd.asp)

The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to James K. Pennington, P.E., at the above letterhead address. If you have any other questions, please contact Bobby Bull at 850/921-9585.

Sincerely,

Trina L. Vielhauer
Chief
Bureau of Air Regulation

TLV/jkp/rlb

Enclosures

"More Protection, Less Process"

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In the Matter of an
Application for Permits by:

Mosaic Phosphates Company
7450 Highway 630
Mulberry, Florida 33860

DRAFT Title V Air Operation Permit Renewal Project
No.: 1050055-014-AV
Draft Air Construction Permit Project No.: 1050055-015-AC
South Pierce Plant
Polk County

**WRITTEN NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR
OPERATION PERMIT RENEWAL**

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit (AC) and a Title V Air Operation Permit (Permit) renewal (copies of the DRAFT AC and DRAFT Permit attached) for the Title V source detailed in the application specified above, for the reasons stated below.

The applicant, Mosaic Phosphates Company applied on September 29, 2003, to the permitting authority for a Permit Renewal for the South Pierce Plant, 7450 Highway 630, Mulberry, Polk County. On February 14, 2005, the applicant submitted an air construction application.

The Air Construction Permit 1050055-015-AC is being issued to remove ten (10) emissions units from the current Title V permit.

The Permit renewal is being issued to allow continued commercial operation of the facility, as authorized by the initial Permit, No. 1050055-008-AV, and incorporate the terms of Air Construction Permits 1050055-013-AC and 1050055-015-AC.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-212, and 62-213. This source is not exempt from construction and Title V permitting procedures. The permitting authority has determined that an AC and a Permit renewal are required to commence or continue operations at the described facility.

The permitting authority intends to issue the AC and the Permit renewal based on the belief that reasonable assurances have been provided to indicate that the AC activity and operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax: 850/921-9533), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106, F.A.C.

The permitting authority will issue the AC and the PROPOSED Permit and subsequent FINAL Permit, in accordance with the conditions of the attached Draft AC and the DRAFT Permit, unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The permitting authority will accept written comments concerning the proposed AC issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft AC, the permitting authority shall issue a Revised Draft AC and require, if applicable, another Public Notice.

The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments must be post-marked and all facsimile comments must be received by the close of business (5:00 pm), on or before the end of this 30-day period, by the Permitting Authority at the above address or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit revision applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number, if known;
- (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;
- (c) A statement of how and when each petitioner received notice of the agency action or proposed action;
- (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
- (e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;
- (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,
- (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and,
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the

Mosaic Phosphates Company

South Pierce Plant

DRAFT Title V Air Operation Permit Project No.: 1050055-014-AV

Draft Air Construction Permit Project No.: 1050055-015-AC

Page 4 of 5

Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at: <http://www.epa.gov/region4/air/permits/Florida.htm>.

Executed in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**



Trina L. Vielhauer, Chief
Bureau of Air Regulation

Mosaic Phosphates Company
South Pierce Plant
DRAFT Title V Air Operation Permit Project No.: 1050055-014-AV
Draft Air Construction Permit Project No.: 1050055-015-AC
Page 5 of 5

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the Combined PUBLIC NOTICE, Draft AC and DRAFT Permit) and all copies were sent by certified mail before the close of business on 3/22/05 to the person(s) listed:

Jeffrey Golwitzer, Plant Manager, Mosaic Phosphates Company, 7450 Highway 630, Mulberry, Florida 33860

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the Combined PUBLIC NOTICE, Draft AC and DRAFT Permit) were sent by U.S. mail on the same date to the person(s) listed:

John B. Koogler, PhD., P.E., Koogler and Associates
Pradeep Raval, Consultant, Koogler and Associates
Phil Steadham, Environmental Superintendent, Mosaic Phosphates Company

In addition, the undersigned duly designated deputy agency clerk hereby certifies that copies of this INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL (including the Draft AC and DRAFT Permit packages) were sent by INTERNET E-mail on the same date to the person(s) listed:

Jerry Kissel, FDEP- SWD
Jason Waters, FDEP- SWD
U.S. EPA, Region 4

Clerk Stamp

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

Paulina J. Friday 3/22/05
(Clerk) (Date)

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V
AIR OPERATION PERMIT RENEWAL**

Permitting Authority
Department of Environmental Protection

DRAFT Title V Air Operation Permit No. 1050055-014-AV
DRAFT Air Construction Permit 1050055-015-AC
Mosaic Phosphates Company
South Pierce Plant
Polk County

Applicant: The applicant for this project is Mosaic Phosphates Company, 7450 Highway 630, Mulberry, Florida 33860. The applicant's responsible official is Jeffery Golwitzer, Plant Manager.

Facility Location: The applicant operates a phosphate plant, which is located at 7450 Highway 630 in Polk County, Florida.

Project: On September 29, 2003, the applicant submitted an application for a Title V Air Operation Permit (Permit) Renewal. On February 14, 2005, the applicant applied for an air construction permit (AC). Details of the project are provided in the application and the enclosed "Statement of Basis", for the Permit Renewal, and the Technical Evaluation and Preliminary Determination, for the AC.

The Air Construction Permit 1050055-015-AC is being issued to remove ten (10) emissions units from the current Title V permit.

The Permit renewal is being issued to allow continued commercial operation of the facility, as authorized by the initial Permit, No. 1050055-008-AV, and incorporate the terms of Air Construction Permits 1050055-013-AC and 1050055-015-AC.

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); a monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; 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.

Based on the Title V Air Operation Permit Renewal application received September 29, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63 and Compliance Plan CP-1.

Permitting Authority: Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to operate the facility. The Department of Environmental Protection is the Permitting Authority responsible for making a permit determination regarding this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301. The Permitting Authority's mailing address is: Division of Air Resource Management, MS 5505, 2600 Blair Stone Road, Tallahassee, FL 32399-2400. The Permitting Authority's telephone number is 850/488-0114 and facsimile 850/921-9533.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the DRAFT Permit, the Statement of Basis, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the DRAFT Permit and file electronic comments by visiting the following website: <http://www.dep.state.fl.us/air/eproducts/ards/>. A copy of the complete project file is also available at the Southwest District at 3804 Coconut Palm Drive, Tampa, FL, 33619-1352 (Telephone: 813/744-6100).

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V
AIR OPERATION PERMIT RENEWAL**

Notice of Intent to Issue A Permit: The Permitting Authority gives notice of its intent to issue an AC and a permit renewal to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the facility will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-256, 62-257, 62-281, 62-296, and 62-297, F.A.C. The Permitting Authority will issue an AC and the PROPOSED Permit and subsequent FINAL Permit in accordance with the conditions of the DRAFT AC and DRAFT Permit unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

Comments: The permitting authority will accept written comments concerning the proposed AC issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft AC, the permitting authority shall issue a Revised Draft AC and require, if applicable, another Public Notice.

The Permitting Authority will accept written comments concerning the DRAFT Permit for a period of thirty (30) days from the date of publication of this "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments must be post-marked and all e-mail or facsimile comments must be received by the close of business (5 pm) on or before the end of this 30-day period by the Permitting Authority at the above address, email or facsimile. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location on the Department's official web site for notices at <http://tlhora6.dep.state.fl.us/onw> and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority at the above address or phone number. If written comments or comments received at a public meeting result in a significant change to the DRAFT Permit, the Permitting Authority shall issue a Revised DRAFT Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen (14) days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within fourteen (14) days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of how and when the petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and, (g) A statement of the relief sought by the petitioner,

**PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V
AIR OPERATION PERMIT RENEWAL**

stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of intent. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

Objections: In addition to the above right to petition, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within sixty (60) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the Permit that were raised with reasonable specificity during the thirty (30) day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

STATEMENT OF BASIS

Mosaic Phosphates Company
South Pierce Facility
Facility ID No.: 1050055
Polk County

Title V Air Operation Permit Renewal
DRAFT 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 construction permit, No. 1050055-013-AC, issued on June 17, 2003, air construction permit, No. 1050055-015-AC, and the incorporation of a Compliance Plan.

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. CAM does not apply.

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); a purified monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; a ball mill grinding system; three MAP/DAP storage silos; MAP/DAP Plant -- bagging machine; MAP/DAP Plant -- bulk truck loading; MAP/DAP Plant -- bulk railcar loading; 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.

Based on the Title V Air Operation Permit Renewal application received September 29, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63 and Compliance Plan CP-1.

PRELIMINARY DETERMINATION

Mosaic Phosphates Company

Deletion of Emissions Units and Removal
Of Obsolete Permit Conditions
South Pierce Plant
Polk County, Florida

DEP File Number
1050055-015-AC

Florida Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

March 8, 2005

PRELIMINARY DETERMINATION

I. APPLICATION INFORMATION

A. Applicant

Mosaic Phosphates Company- South Pierce Plant
7450 Highway 630
Mulberry, Polk County, Florida 33860
Authorized Representative: Mr. Jeffry A. Golwitzer

B. Engineer

John B. Koogler, Ph.D., P.E.
Koogler and Associates
4014 NW 13th Street
Gainesville, FL 32609

C. Project and Location

The air construction permit 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. EU No. 002- West Loadout, No. 016- Silicofluoride Plant Dryer, No. 017- Silicofluoride Plant Packaging, and No. 046- MAP/DAP Filter Cake Dryer were also requested to be removed from the permit. However, none of these units were incorporated into the initial Title V operating permit. Currently, none of these emission units are in operation.

All emissions units are located at the South Pierce Plant.

D. Facility Location

The applicant's facility is located at 7450 Highway 630, Mulberry, Polk County, Florida. Latitude and longitude are 27° 46' 56" North and 81° 55' 55" West, respectively. UTM coordinates of the site are: Zone 17, 407.5 km East and 3071.4 km North.

Facility Identification Code (SIC): Major Group No. 28, Industry Group Nos. 2874.

E. Process and Controls

There will be no new process or controls introduced in this air construction permit.

PRELIMINARY DETERMINATION

F. Reviewing and Process Schedule

2/14/05: Date of Receipt of Application

2/16/05: Application complete

II. SUMMARY OF EMISSIONS

The emissions limitations for all existing emissions units will remain unchanged with this construction permit.

CONCLUSION

Based on the information submitted by Mosaic Phosphate Company., the Department has made a preliminary determination that the proposed project will comply with all applicable state air pollution regulations of Chapters 62-204 through 62-297, F.A.C. The General and Specific Conditions are listed in the attached draft conditions of approval.

PROPOSED AGENCY ACTION

Pursuant to Sec. 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department hereby gives notice of its intent to delete the aforementioned air pollution sources in accordance with the draft permit and its conditions as stipulated.



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 Phosphates Company
South Pierce Plant
7450 Highway 630
Mulberry, FL 33860

Authorized Representative:
Jeffrey A. Golwitzer, Plant Manager
South Pierce Plant

| | |
|------------|--|
| Permit No. | 1050055-015-AC |
| Project: | Deletion of Emissions Units and Removal of obsolete conditions |
| SIC: | 2874 |
| Expires: | January 30, 2006 |

PROJECT AND LOCATION:

This air construction permit is for the deletion of emissions units, deletion of obsolete conditions, and the addition of clarifying conditions as applicable to the Title V Operation Permit.

The Mosaic Phosphates Company South Pierce Plant is located at 7450 Highway 630, Mulberry, Polk County. UTM coordinates are Zone 17; 407.5 km E; 3071.4 km N.

STATEMENT OF BASIS:

This air construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to construct/operate the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendices made a part of this permit:

Appendix GC Construction Permit General Conditions

Michael G. Cooke, Director
Division of Air Resource
Management

SECTION I. GENERAL INFORMATION

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); a monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; one dry ball mill grinding system; three MAP/DAP storage silos; MAP/DAP Plant -- bagging machine; MAP/DAP Plant -- bulk truck loading; MAP/DAP Plant -- bulk railcar loading; GTSP storage building; and a GTSP rock hopper.

EMISSIONS UNITS

This permit revision addresses the following emissions units. Emission Units shown as stricken through are no longer permitted.

E.U. ID

| <u>No.</u> | <u>Brief Description</u> |
|-----------------|---|
| -001 | Auxiliary Boiler |
| -003 | Purified MAP/DAP Plant |
| -004 | Sulfuric Acid Plant #10 |
| -005 | Sulfuric Acid Plant #11 |
| -008 | Phosphoric Acid Plant - A Train |
| -009 | Phosphoric Acid Plant - B Train |
| -012 | Purified MAP/DAP Plant Storage Silo No. 3 |
| -013 | Purified MAP/DAP Plant Bagging Machine |
| -014 | Purified MAP/DAP Plant Bulk Truck Loading |
| -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 |
| -027 | Purified MAP/DAP Plant Storage Silo No. 2 |
| -028 | Purified MAP/DAP Plant Storage Silo No. 1 |
| -029 | Purified MAP/DAP Plant Bulk Railcar Loading |
| -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 |
| -034 | Molten Sulfur Storage - (East) Tank 1 - Vent 5 |
| -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 |
| -044 | Molten Sulfur Rail Pit - North Vent |
| -045 | Molten Sulfur Rail Pit - South Vent |
| -048 | Phosphogypsum Stack |

SECTION I. GENERAL INFORMATION

REGULATORY CLASSIFICATION

Because potential emissions of at least one regulated pollutant exceed 100 tons per year, the existing facility is a Title V Source and major source of air pollution in accordance with Chapter 62-213, F.A.C. Regulated pollutants include pollutants such as nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and sulfuric acid mist (SAM).

In addition, the Department has determined the facility to be a major source of hazardous air pollutants (HAPs) and affected sources are subject to 40 CFR 63 Subparts AA and BB.

Sulfuric Acid Plants No. 10 and No. 11 are subject to 40 CFR 60.80-85 as they apply to emissions of sulfuric acid mist only.

RELEVANT DOCUMENTS

- Construction Permit Application 1050055-015-AC received February 14, 2005, including request for concurrent processing of Title V Air Operation Permit Revision. The Title V Air Operation Permit Revision will be incorporated into the Title V Air Operation Permit Revision/Renewal project 1050055-014-AV.

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

1. Permitting Authority:

a. For this permit, the permitting authority is the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, and phone number (850)488-0114.

b. For future permitting actions, all documents related to applications for permits to construct or modify an emissions unit should be submitted to the Florida Department of Environmental Protection (FDEP), Southwest District, 3804 Coconut Palm Drive, Tampa, FL 33619-1352 and phone number (813) 744-6100.

2. Compliance Authority: All documents related to operation, reports, tests, and notifications should be submitted to the Department of Environmental Protection Southwest District Office at

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-1352
Telephone: 813/744/6100 Fax: 813/744-6084

3. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

4. Terminology: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.

5. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]

6. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]

7. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

8. Completion of Construction: The permit expiration date is January 30, 2006.

9. Permit Expiration Date Extension: The permittee, for good cause, may request that this permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. [Rule 62-4.080, F.A.C.]

10. Application for Title V Permit Revision: Concurrent processing of Air Construction Permit Application 1050055-015-AC and Title V Permit Revision/Renewal 1050055-014-AV.

11. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]

12. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All plant operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
13. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without the applicable air control device operating properly. [Rule 62-210.650, F.A.C.]
14. Unconfined Particulate Matter Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
15. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to any initial performance tests and at least 15 days prior to any other required tests. Notification shall include the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and conducting the test. [Rule 62-297.310(7)(a)9., F.A.C. and 40 CFR 60.7, 60.8]
16. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
17. Applicable Test Procedures
 - a. Required Sampling Time: Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be sixty (60) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur. [Rule 62-297.310(4)(a)1. and 2., F.A.C.]
 - b. Minimum Sample Volume: Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet. [Rule 62-297.310(4)(b), F.A.C.]
 - c. Calibration of Sampling Equipment: Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C. [Rule 62-297.310(4)(d), F.A.C.]
18. Determination of Process Variables
 - a. Required Equipment: The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. [Rule 62-297.310(5)(a), F.A.C.]
 - b. Accuracy of Equipment: Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5)(b), F.A.C.]

SECTION II. FACILITY-WIDE SPECIFIC CONDITIONS

19. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
20. Stack Testing Facilities: Required stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C. [Rule 62-297.310]
21. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2)(b), F.A.C.]
22. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department, upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]
23. Emissions Performance Test Results Reports: A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.]
24. Annual Operating Reports: The permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP Southwest District by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

The following descriptions and specific conditions established in the initial Title V Air Operation Permit, No. 1050055-008-AV are changed as follows. Additions are **highlighted**, and deletions are shown by **strikethroughs**:

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| 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 | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

| | |
|---|-------------|
| 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 | |
| 044 Molten Sulfur Rail Pit - North Vent | |
| 045 Molten Sulfur Rail Pit - South Vent | J1 J3 H1 H3 |
| 048 Phosphogypsum Stack | K1 K1 I1 I1 |

Section I. Facility Information, Subsections A and B

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); a monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; one dry ball mill grinding system; three MAP/DAP storage silos; MAP/DAP Plant bagging machine; MAP/DAP Plant bulk truck loading; MAP/DAP Plant bulk railcar loading; GTSP storage building; and a GTSP rock hopper.

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

Based on the initial Title V permit application received June 14, 1996 (which contained a qualifying statement related to hazardous air pollutants), this facility is not a major source of hazardous air pollutants (HAPs). Based on the proposed rule "National Emission Standards for Hazardous Air Pollutants Phosphoric Acid Manufacturing and Phosphate Fertilizers Production" (reference Federal Register 12/27/96), this facility will probably be considered a major source of HAPs, and permitting considerations will be deferred until the promulgation of this MACT rule.

Based on the Title V Air Operation Permit Renewal application received September 26, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63 and Compliance Plan CP-1.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

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 |
| -003 | Purified MAP/DAP Plant |
| -004 | Sulfuric Acid Plant #10 |
| -005 | Sulfuric Acid Plant #11 |
| -008 | Phosphoric Acid Plant - A Train |
| -009 | Phosphoric Acid Plant - B Train |
| -012 | Purified MAP/DAP Plant Storage Silo No. 3 |
| -013 | Purified MAP/DAP Plant Bagging Machine |
| -014 | Purified MAP/DAP Plant Bulk Truck Loading |
| -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 |
| -027 | Purified MAP/DAP Plant Storage Silo No. 2 |
| -028 | Purified MAP/DAP Plant Storage Silo No. 1 |
| -029 | Purified MAP/DAP Plant Bulk Railcar Loading |
| -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 |
| -034 | Molten Sulfur Storage - (East) Tank 1 - Vent 5 |
| -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 |
| -044 | Molten Sulfur Rail Pit - North Vent |
| -045 | Molten Sulfur Rail Pit - South Vent |
| -048 | Phosphogypsum Stack |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section II. Facility-wide Conditions.

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 |
| B | 003 | Purified MAP/DAP Plant | 4.4 ¹ | 19.3 ¹ |
| E | 012 | Purified MAP/DAP Plant Storage Silo No. 3 | 0.03 ¹ | 0.13 ¹ |
| E | 013 | Purified MAP/DAP Plant Bagging Machine | 0.09 ¹ | 0.4 ¹ |
| E | 014 | MAP/DAP Plant Bulk Truck Loading | 0.05 ¹ | 0.22 ¹ |
| E | 027 | Purified MAP/DAP Plant Storage Silo No. 2 | 0.03 ¹ | 0.13 ¹ |
| E | 028 | Purified MAP/DAP Plant Storage Silo No. 1 | 0.03 ¹ | 0.13 ¹ |
| E | 029 | MAP/DAP Plant Bulk Railcar Loading | 0.05 ¹ | 0.22 ¹ |
| F D | 022 | No. 2 Ball Mill Grinding System | 31.8 | 139.3 |
| G E | 023 | GTSP Production Plant | 35 | 153 |
| H F | 024-25 | GTSP East Storage Building - North scrubber system | 40.1 | 175.6 |
| H | 025 | GTSP East Storage Building - South scrubber system | | |
| I G | 026 | GTSP Rock Hopper Bin | 22.5 | |
| J H | 030-034 033 | Molten Sulfur Storage - East Tank | 0.50 ² | 1.40 ² |
| J H | 035-039 | Molten Sulfur Storage - West Tank | 0.50 ² | 1.40 ² |
| J H | 040-043 | Molten Sulfur Storage - Truck Pit | 0.92 ² | 4.06 ² |
| J | 044-045 | Molten Sulfur Storage - Rail Pit | 0.22 ² | 0.08 ² |
| Total | | | 138.62 | |
| | | | 133.22 | |

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Section III. Emissions Unit(s) and Conditions. Subsection B

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

E.U. ID

No. Brief Description

~~-003 Purified MAP/DAP Plant~~

~~The Purified Monoammonium Phosphate (MAP)/Diammonium Phosphate (DAP) Plant produces ammoniated phosphates (DAP and MAP). The Purified MAP/DAP Plant consists of MAP and DAP reactors, filter, crystallizer, centrifuge and dryer. Particulate and fluoride emissions from the MAP/DAP plant are controlled by a combination two-stage venturi-cyclonic and packed-bed scrubber equipped with a mist eliminator.~~

~~{Permitting note(s): This emissions unit is regulated under NSPS 40 CFR 60, Subpart V, Standards of Performance for Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)27, F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated May 22, 1981; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing.}~~

~~NOTE: This emissions unit is currently shutdown. The last day of operation was November 23, 1995. If this emissions unit is not reactivated by November 23, 2005, the permittee shall obtain an air construction permit prior to subsequent reactivation. [Rule 62-210.300(2)(a)3.c., F.A.C. allows renewal of operation permits for sources which have been shut down for up to 10 years from the date of shutdown.]~~

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

Essential Potential to Emit (PTE) Parameters

B.1. Capacity:

- ~~a. The maximum MAP product rate through the Purified MAP/DAP Plant shall not exceed 19.0 tons per hour (maximum P_2O_5 input to MAP/DAP Plant is 8.8 tons/hr).~~
 - ~~b. The maximum DAP product rate through the Purified MAP/DAP Plant shall not exceed 17.5 tons per hour (maximum P_2O_5 input to MAP/DAP Plant is 7.6 tons/hr).~~
- ~~[Rule 62-4.160(2), F.A.C. and Rule 62-210.200, F.A.C., Definitions (PTE)]~~

Emission Limitations and Standards

~~B.2. Particulate emissions from the Purified MAP/DAP Plant shall not exceed 0.01 grains/dscf, 4.4 lbs./hr., or 19.3 tons/yr.~~
~~[Pursuant to the BACT Determination issued May 22, 1981]~~

~~B.3. Fluoride (F) emissions shall not exceed any of the following limits:~~

- ~~_____ a. 0.06 pounds per ton of phosphate material input expressed as 100% P_2O_5 ;~~
- ~~_____ b. 0.26 pounds per hour; and~~
- ~~_____ c. 0.97 tons per year~~

~~[BACT Determination issued May 22, 1981]~~

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

~~B.4. Visible emissions from the Purified MAP/DAP Plant shall not exceed 20% opacity.
[Rule 62-296.320(4)(b), F.A.C.]~~

Test Methods and Procedures

~~B.5. Compliance with the emission limitations of Conditions B.2, B.3 and B.4 shall be determined using EPA Methods 1, 2, 4, 5, 9 and 13A or 13B as contained in 40 CFR 60, Appendix A and adopted by reference in Section 62-297, F.A.C.
[Rule 62-297, F.A.C.]~~

~~B.6. The permittee shall test the emissions from the Purified MAP/DAP Plant scrubber stack for the following pollutants annually on, or during the 60-day period prior to October 10:~~

- ~~— a. Particulates~~
- ~~— b. Fluorides~~
- ~~— c. Opacity~~

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

Monitoring of Operations

~~B.7. The permittee shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus bearing feed material to the process. The monitoring device shall have an accuracy of ± 5 percent over its operating range.
[40 CFR 60.223(a)]~~

~~B.8. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of ± 5 percent over its operating range.
[40 CFR 60.223(c)]~~

~~B.9. In order to provide reasonable assurance that the control system is operating properly, the permittee shall create and keep a record log of the scrubber operating parameters. The record log shall contain, at a minimum:~~

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

~~A record log entry shall be made at least once for every 12-hour period.~~

~~NOTE: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this Condition.~~

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

~~B.10. In order to provide reasonable assurance, when the Purified MAP/DAP Plant is operating, that the pollution control equipment is operating properly, the permittee shall comply with Facility-wide Condition No. 14.~~

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

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Recordkeeping and Reporting Requirements

B.11. The permittee shall maintain a daily record of the following:

- a. the equivalent P_2O_5 feed rate according to the procedure specified in 40 CFR 60.223(b)–
Monitoring of Operations;
- b. hours of operations.

[40 CFR 60.223, Rule 62-4.070(3), F.A.C.]

Section III. Emissions Unit(s) and Conditions. Subsection E

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

E.U. ID

| <u>No.</u> | <u>Brief Description</u> |
|------------|---|
| -012 | Purified MAP/DAP Plant Storage Silo No. 3 |
| -013 | Purified MAP/DAP Plant Bagging Machine |
| -014 | MAP/DAP Plant Bulk Truck Loading |
| -027 | Purified MAP/DAP Plant Storage Silo No. 2 |
| -028 | Purified MAP/DAP Plant Storage Silo No. 1 |
| -029 | MAP/DAP Plant Bulk Railcar Loading |

The Purified MAP/DAP Plant Storage Silo No. 3 consists of a storage silo and a baghouse. This silo is located to the northwest of Storage Silos No. 1 and No. 2.

The Purified MAP/DAP Plant Bagging Machine is equipped with a baghouse for controlling particulate matter emissions.

The Purified MAP/DAP Plant Bulk Truck Loading is equipped with a baghouse for controlling particulate matter emissions.

The Purified MAP/DAP Plant Storage Silo No. 2 consists of a storage silo and a baghouse. This silo is located in the center of Storage Silos No. 1 and No. 3.

The Purified MAP/DAP Plant Storage Silo No. 1 consists of a storage silo and a baghouse. This silo is located to the southeast of Storage Silos No. 2 and No. 3.

The Purified MAP/DAP Plant Bulk Railcar Loading is equipped with a baghouse for controlling particulate matter emissions.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Best Available Control Technology (BACT) Determination, dated May 22, 1981.}

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

Essential Potential to Emit (PTE) Parameters

E.1. Capacity:

a. The maximum MAP product rate through the Purified MAP/DAP Plant shall not exceed 19.0 tons per hour (maximum P_2O_5 input to MAP/DAP Plant is 8.8 tons/hr). (see Condition B.1.)

b. The maximum DAP product rate through the Purified MAP/DAP Plant shall not exceed 17.5 tons per hour (maximum P_2O_5 input to MAP/DAP Plant is 7.6 tons/hr). (see Condition B.1.)

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

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

Emission Limitations and Standards

E.2. Visible emissions from any of these emissions units, and associated storage and conveying equipment, shall not be equal to or greater than 20% opacity.
[Rule 62-296.320(4)(b), F.A.C.]

E.3. Particulate Matter (PM) emissions from these emission units shall not exceed the following:

| Point ID: | Description | Particulate Matter (PM) limit | |
|-----------|---|-------------------------------|---------------|
| | | lbs/hr | Tons per year |
| -012 | Purified MAP/DAP Plant Storage Silo No. 3 | 0.03 ¹ | 0.13 |
| -013 | Purified MAP/DAP Plant Bagging Machine | 0.09 ² | 0.4 |
| -014 | MAP/DAP Plant Bulk Truck Loading | 0.05 ² | 0.22 |
| -027 | Purified MAP/DAP Plant Storage Silo No. 2 | 0.03 ¹ | 0.13 |
| -028 | Purified MAP/DAP Plant Storage Silo No. 1 | 0.03 ¹ | 0.13 |
| -029 | MAP/DAP Plant Bulk Railcar Loading | 0.05 ² | 0.22 |

¹Based on a compliance grain loading value of 0.01 grains per dry standard cubic foot and a design air flow rate of 300 dry standard cubic feet per minute.

²Based on a compliance grain loading value of 0.01 grains per dry standard cubic foot and a design air flow rate of 500 dry standard cubic feet per minute.
[BACT determination May 22, 1981.]

Test Methods and Procedures

E.4. The permittee shall test the emissions from Purified MAP/DAP Plant Storage Silos No. 1, No. 2 and No. 3; Purified MAP/DAP Plant Bagging Machine; MAP/DAP Bulk Truck Loading; and MAP/DAP Bulk Railcar Loading for the following pollutants on, or during the 60 day period prior to the test due dates and test intervals shown below:

| Pollutant | Test Interval | Test Due Date | | | | | |
|--------------|---------------|---|---|---|--|-------------------------------------|---------------------------------------|
| | | Purified MAP/DAP Plant Storage Silo No. 1 | Purified MAP/DAP Plant Storage Silo No. 2 | Purified MAP/DAP Plant Storage Silo No. 3 | Purified MAP/DAP Plant Bagging Machine | Purified MAP/DAP Bulk Truck Loading | Purified MAP/DAP Bulk Railcar Loading |
| Opacity | annually | 60 days after startup | 60 days after startup | 60 days after startup | 60 days after startup | 60 days after startup | 60 days after startup |
| Particulates | five years | Expiration Date of Permit | Expiration Date of Permit | Expiration Date of Permit | Expiration Date of Permit | Expiration Date of Permit | Expiration Date of Permit |

Testing at conditions that are not representative of actual operating conditions, failure to include the input rates and actual operating conditions may invalidate the test.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

~~E.5. Compliance with visible and particulate emission limitations of Conditions E.2 and E.3 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.~~
~~[Rule 62-297, F.A.C.]~~

Monitoring of Operations

~~E.6. In order to demonstrate compliance with Rule 62-210.650, the permittee shall record the pressure drop across each baghouse daily.~~
~~[Rule 62-4.070(3), F.A.C.]~~

Recordkeeping and Reporting Requirements

~~E.7. In order to document compliance with the process rate limitations of Condition E.1, the permittee shall maintain records of the MAP and DAP product rate through the Purified MAP/DAP Plant and the total hours of process operations as stated in Condition B.12.~~

~~NOTE: The Purified MAP/DAP Plant storage silo transfer rate (Silos Nos. 1, 2 and 3) are dependent on the Purified MAP/DAP Plant production rate. The recording of the amount of material processed and the total hours of process operations for the Purified MAP/DAP Plant should suffice for the Purified MAP/DAP Plant storage silos.~~
~~[Rule 62-4.070(3), F.A.C.]~~

Section III. Emissions Unit(s) and Conditions. Subsection J

Subsection J. 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 |
| -034 | Molten Sulfur Storage - (East) Tank 1 - Vent 5 |
| -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 |
| -044 | Molten Sulfur Rail Pit - North Vent |
| -045 | Molten Sulfur Rail Pit - South Vent |

APPENDIX GC
CONSTRUCTION PERMIT GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]

- G.1** The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2** This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3** As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4** This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5** This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6** The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7** The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- (a) Have access to and copy and records that must be kept under the conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,

APPENDIX GC
CONSTRUCTION PERMIT GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]

(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

(a) A description of and cause of non-compliance; and

(b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages, which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This permit also constitutes:

(a) Determination of Best Available Control Technology (not applicable to project);

(b) Determination of Prevention of Significant Deterioration (not applicable to project);
and

(c) Compliance with New Source Performance Standards (not applicable to project).

APPENDIX GC
CONSTRUCTION PERMIT GENERAL CONDITIONS [RULE 62-4.160, F.A.C.]

- G.14** The permittee shall comply with the following:
- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15** When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

STATEMENT OF BASIS

Mosaic Phosphates Company
South Pierce Facility
Facility ID No.: 1050055
Polk County

Title V Air Operation Permit Renewal
DRAFT 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 construction permit, No. 1050055-013-AC, issued on June 17, 2003, air construction permit, No. 1050055-015-AC, and the incorporation of a Compliance Plan.

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. CAM does not apply.

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); a purified monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; an auxiliary boiler; a granular triple superphosphate (GTSP) production plant; a molten sulfur storage and handling system; a ball mill grinding system; three MAP/DAP storage silos; MAP/DAP Plant -- bagging machine; MAP/DAP Plant -- bulk truck loading; MAP/DAP Plant -- bulk railcar loading; 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.

Based on the Title V Air Operation Permit Renewal application received September 29, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63 and Compliance Plan CP-1.

Mosaic Phosphates Company
South Pierce Facility
Facility ID No.: 1050055
Polk County

Title V Air Operation Permit Renewal
DRAFT 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: 850/922-6979

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

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

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

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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 Phosphates Company
7450 Highway 630
Mulberry, FL 33860

DRAFT 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, and incorporate a Compliance Plan (CP-1). 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 TV-1, TITLE V CONDITIONS (version dated 12/02/97)

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/7/96)

TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/7/96)

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40 CFR 63 Subparts A (General Provisions), AA (NESHAP for Phosphoric Acid Plants), and BB (Phosphate Fertilizer Plants)

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

Compliance Plan CP-1

Effective Date: ARMS Day 55

Renewal Application Due Date: TBD

Expiration Date: TBD

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Michael G. Cooke, Director
Division of Air Resource Management

MGC/JKP/rlb

"More Protection, Less Process"

Printed on recycled paper.

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); a monoammonium phosphate/diammonium phosphate (MAP/DAP) plant; 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.

Based on the Title V Air Operation Permit Renewal application received September 29, 2003, the Department has determined that this facility is a major source of hazardous air pollutants (HAPs), based upon its estimation of emissions of hydrogen fluoride. If additional testing and modeling demonstrate 1) that the facility is not and has never been a major source of hazardous air pollutants since at least June 10, 2002, or 2) if prospective changes to Subparts AA and BB warrant such an outcome, the permittee shall have the right to request that the Department revise the determination of major source status and revise this permit to remove all requirements and conditions based on 40 CFR Part 63 and Compliance Plan CP-1.

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 |

E.U. ID

| <u>No.</u> | <u>Brief Description</u> |
|-------------------|---|
| -042 | Molten Sulfur Truck Pit - West Vent with Fan |
| -043 | Molten Sulfur Truck Pit - West Vent without Fan |
| -048 | Phosphogypsum Stack |

Unregulated Emissions Units and/or Activities

| | |
|------|---|
| -049 | Facility-Wide Fugitive Emissions |
| -050 | Molten Sulfur Transfer Pit with two vents |

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

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-4, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-4, 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. Compliance Plan. Based on the application, emissions units was/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.]

7. 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.]

8. 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.]

9. 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.]

10. 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.]

11. 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)]

12. 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

13. 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].

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. [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
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6458

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-4, 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.]

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.; 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.}

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 1050055-014-AC]

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]

{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.}

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. The maximum allowable particulate matter emission rate from the No. 2 Ball Mill Grinding System baghouse exhaust shall not exceed 2.4 pounds per hour and 10.7 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]

A.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.

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

A.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.].

A.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.].

Test Methods and Procedures

A.8. 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.9. 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.10. 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.11. 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.12. 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.13. 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

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 exceed 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 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.}

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]

Emission Limitations and Standards

B.2. 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.3. 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.4. 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.5. 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.6. 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. [Rule 62-210.700(1), F.A.C.].

B.7. 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.8. 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.9. 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.10. 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.11. The permittee shall test the emissions from Sulfuric Acid Plants No. 10 and No. 11 for the following pollutants on, or during the 60 day period prior to the test due dates and test intervals shown below:

| Pollutant | Test Interval | Test Due Date | |
|-----------------|---------------|----------------------------|----------------------------|
| | | Sulfuric Acid Plant No. 10 | Sulfuric Acid Plant No. 11 |
| Opacity | annually | October 1 | October 3 |
| Sulfur Dioxide | annually | October 1 | October 3 |
| Acid Mist | annually | October 1 | October 3 |
| Nitrogen Oxides | annually | October 1 | October 3 |

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

B.12. Compliance with the emission limitations of Conditions B.2, B.3, and B.4 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.13. 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.14. 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). A record of all conversion factors and values from which they were calculated shall be maintained. The permittee may also use the alternative method 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.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.]

Continuous Monitoring Requirements

B.16. 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.17. 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.18. 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.19. 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.20. 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.21. In order to document ongoing compliance with the emission limitations of Conditions B.2 and B.3, the permittee shall maintain monthly records of Sulfuric Acid Plant sulfur dioxide (SO_2) emissions for each emission unit. The records shall include the following for each day of the month:

- a. daily acid production (in tons as 100% H_2SO_4);
- b. hours operated;
- c. daily average pounds/ton SO_2 emission rate;

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

B.22. 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.23. 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 a packed bed, cross-flow scrubber.

{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. **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 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 (maximum production rate of 50 tons P_2O_5 product per hour). [Permit AC53-34868, and 40 CFR 60.202]

⁽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.

[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.].

C.5. 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

C.6. 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.].

C.7. The permittee shall test the emissions from Phosphoric Acid Plant Train A and B scrubbers for fluorides on, or during the 60 day period prior to the test due dates and test intervals shown below:

| Pollutant | Test Interval | Test Due Date | |
|-----------|---------------|-------------------------------|-------------------------------|
| | | Phosphoric Acid Plant Train A | Phosphoric Acid Plant Train B |
| Fluoride | annually | April 16 | June 5 |

C.8. Compliance with the fluoride emission limitation of Condition C.2 shall be determined using EPA Methods 1, 2, 4 and 13A or 13B as contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C., and as specified in 40 CFR 60.204 - Test Methods and Procedures, or a Department approved alternate test procedure or testing requirement per Rule 62-297.620 - Exceptions and Approval of Alternate Procedures and Requirements.
[Rule 62-297, F.A.C.]

C.9. 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:

- the dates the pads were placed into service,
- the dates the pads were replaced,
- the dates the pads were inspected,
- the person responsible for performing the pad replacement or inspection,

The following apply to both Trains A & B:

- the water flow rate (gallons per minute), and
- the scrubber pressure drop (inches of water).

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

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

A log entry shall be made at least once for every 12 hour period that the phosphoric acid train operates.

NOTE: The permittee may substitute continuous monitoring and strip chart recordings for the manual recordkeeping required by this Condition.

[Rules 62-4.070(3), 62-4.160(14)(b), 62-4.160(14)(c), and 62-213.440(b)2.b., F.A.C.]

C.12. When in operation, the liquid flow rate to the scrubber system for Phosphoric Acid Plant "A" or "B" Train shall be a minimum of 1200 gallons per minute and comply with Facility-wide Condition No. 16.

[AO53-212236 and AO53-212237 Amendments request dated September 17, 1996 and Rule 62-4.070(3), F.A.C.]

C.13. In order to provide reasonable assurance that the air pollution control equipment or system are operating properly, the permittee shall comply with the following:

- a. The liquid flow rate (gallons per minute) to the pollution control system (e.g., scrubber) shall not fall below:
 1. 90% of the rate reported during the most recent satisfactory compliance test, following the final issuance of this permit, or
 2. lower than a minimum liquid flow rate limit specified in a condition of this permit.
- b. the pressure drop (inches of water) across the pollution control system (e.g., scrubber) shall not fall below:
 1. 90% of the rate reported during the most recent satisfactory compliance test, following the final issuance of this permit,
 2. lower than a minimum pressure drop limit specified in a condition of this permit.
 3. In the case of pressure drops of less than 5 inches of water, a change of 0.5 inches of H₂O below the drop reported during the most recent satisfactory compliance test, following the final issuance of this permit.

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

C.14. 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.]

Continuous Monitoring Requirements

C.15. The permittee shall install, calibrate, maintain, and operate a monitoring device which can be used to determine the mass flow of phosphorus-bearing feed material to the process.
[Rule 62-4.070(3), F.A.C.]

C.16. The permittee shall install, calibrate, maintain, and operate a monitoring device which continuously measures and permanently records the total pressure drop across the process scrubbing system. The monitoring device shall have an accuracy of $\pm 5\%$ over its operating range.
[Rule 62-4.070(3), F.A.C.]

Recordkeeping and Reporting Requirements

C.17. 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. This daily log shall be maintained at the facility.
[40 CFR 60.203 and Rules 62-4.070(3), F.A.C., and 62-213.440(b)2.b., F.A.C.]

C.18. 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.]

C.19. 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

C.20. 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.}

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 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.5. 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.6. 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.7. Test the baghouse exhaust for visible emissions per Condition D.3 annually, or during the 60 day period prior to March 2.
[Rule 62-297.310(7), F.A.C.]

D.8. 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.9. 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.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

D.11. 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.12. In order to document compliance with the process rate limitation of Condition D.1, the permittee shall maintain daily records of the amount of material processed and the total hours of process operations,
[Rule 62-4.070(3), F.A.C.]

D.13. 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

| <u>No.</u> | <u>Brief Description</u> |
|-------------------|---------------------------------|
| -023 | 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. **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 (see Condition No. 19). [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. 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.4. Fluoride emissions from the GTSP plant shall not exceed 5.7 pounds per hour, 0.15 pounds per ton P_2O_5 input, and 25 tons per year. [Rule 62-296.403(1)(d)2. and application dated 7/23/93]

E.5. 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.6. 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. [Rule 62-210.700(1), F.A.C.]

E.7. 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.]

E.8. 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

E.9. 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.]

E.10. Test the stack emissions for particulate matter, fluorides, and visible emissions annually on, or during the 60 day period prior to April 22. [Rules 62-297.310(7), and 62-297.310(8), F.A.C.]

E.11. Compliance with the emission limitations shall be determined using EPA Methods 1,2,3,4,5,9 and 13A or 13B as contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-297, F.A.C.]

E.12. 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.13. 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.14. 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

E.15. The permittee shall install, calibrate, maintain, and operate monitoring devices which measure the following parameters for the RGCV scrubber, the Dryer scrubber, and the 2-stage packed bed tailgas scrubber: [Rule 62-4.070(3), F.A.C.]

- a. Volumetric liquid flow rate (gpm), and
- b. Gas pressure drop (inches w.g.).

Recordkeeping and Reporting Requirements

E.16. The permittee shall maintain a daily record of "equivalent tons P_2O_5 input" to the GTSP plant using the procedure specified in 40 CFR 60.203(b), or an equivalent Department approved procedure.

E.17. The permittee shall create and maintain a record log of each scrubber's parameters. The record log shall contain, at a minimum, the scrubber identification, the scrubber's parameters, the type of scrubber liquid, the date and time of the measurements, and the person responsible for performing the measurements. A record log entry shall be made at least once for every 12 hour period that the GTSP plant operates. The permittee may substitute continuous monitoring and strip chart recordings 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.]

E.18. 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.]

E.19. 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 F. This section addresses the following emissions unit(s).

E.U. ID

| <u>No.</u> | <u>Brief Description</u> |
|-------------------|--|
| -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. **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. 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.

[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.

[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. 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

F.8. 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.]

F.9. 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.

[Rules 62-297.310(7), 62-297.310(1) and 62-297.310(8), F.A.C.]

F.10. Compliance with the emission limitations shall be determined using EPA Methods 1, 2, 4, 5, 9 and 13A or 13B contained in 40 CFR 60, Appendix A and adopted by reference in 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.

[Chapter 62-297, Table 297.310-1, F.A.C.]

F.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

F.12. The permittee shall install, calibrate, maintain, and operate monitoring devices which measure the exhaust fan amperages for both the North and South scrubber systems. The exhaust fan ampere measurements will be used as an alternate indicator of gas pressure drop across each scrubber.

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

Recordkeeping and Reporting Requirements

F.13. The permittee shall establish and maintain a record log for the GTSP East Storage Building. The record log shall include, at a minimum:

- a. exhaust fan amperage for each scrubber, indicating the scrubber identification, the date and time of the measurements, and the person responsible for performing the measurements. A log entry shall be made at least once during every week of GTSP loading or unloading operations,
- b. a reference to loadout records to verify that the 7500 tons per day maximum GTSP production output rate, required by Condition H.1, is not exceeded,
- c. a reference to loading records to verify that the 140 tons per hour maximum GTSP production input rate, as stated in Condition G.1, is not exceeded.

The permittee may substitute continuous monitoring and strip chart recordings 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.]

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

E.U. ID

| <u>No.</u> | <u>Brief Description</u> |
|-------------------|---------------------------------|
| -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.}

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 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.5. 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.6. 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.7. 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.8. 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.9. 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.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

G.11. 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.12. 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.13. 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 |

The molten sulfur storage and handling system comprises of the unloading, transfer and storage of molten sulfur delivered to the plant by railcars and 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 a 100 short ton rail unloading pit, associated transfer pumps and piping.

Molten sulfur from the railcar unloading pit can be transferred to the west storage tank or to the truck receiving pit. Molten sulfur from the truck receiving pit can be transferred to either the east or west storage tank or to the sulfuric acid plants.

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

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].

Emission Limitations and Standards

H.2. Visible emissions from any emission point in the molten sulfur handling and storage system shall not exceed 20% opacity (six minute average).

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

H.3. 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 |
| Rail Pit | 0.24 | 0.09 | 0.12 | 0.04 | 0.31 | 0.11 | 0.18 | 0.07 | 0.22 | 0.08 |

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

H.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.].

H.5. 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

H.6. 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.].

H.7. 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.8. The molten sulfur unloading and handling system shall be tested for visible emissions within 30 days after the railcar unloading pit is first placed in operation. Testing shall be conducted on both of the rail pit vents and on the vents for the storage tank or pit to which the molten sulfur is then being transferred. (See also Condition H.7.)

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

H.9. 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 60 minutes in duration.

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

H.10. The visible emissions tests shall be conducted during conditions that would be expected to produce the highest opacity emissions. 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. Visible emission tests duration shall be at least 30 minutes or the time necessary to complete unloading of a truck or railcar, whichever is greater. 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.

[Construction Permit No. AC53-201152 and Rules 17-4.070(3), and 17-297.310(1), F.A.C.].

H.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.]

Recordkeeping and Reporting Requirements

H.12. In order to document compliance with the requirements of Condition H.1, the permittee shall maintain the following records and make them available to the Department upon request:

- a. Daily, the daily molten sulfur throughput (tons per day) along with a 5 day rolling average (tons/day);
- b. Monthly, the monthly total sulfur throughput rate (tons/month) and total sulfur throughput rate for the year (tons/yr.);

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

H.13. 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

H.14. 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.).}

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).

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

E.U. ID

No.

Brief Description

-050 Molten Sulfur Transfer Pit with two vents

The Molten Sulfur Pit has a capacity of 250 tons. 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 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 (PSD); and Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

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

Essential Potential to Emit (PTE) Parameters

J.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), Air Construction Permit 1050055-013-AC].

J.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

J.3. 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]

J.4. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or railcars shall be paved and curbed within 20 feet of the point of disconnection or transfer to contain any spilled molten sulfur, or shall be provided with 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]

J.5. 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]

J.6. 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]

J.7. Visible emissions from any emission point in the molten sulfur facility shall not exceed 20% opacity (six-minute average).

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

J.8. 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]

J.9. Excess Emissions. 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., Air Construction Permit 1050055-013-AC]

Test Methods and Procedures

J.10. 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]

J.11. Test Method-Visible Emissions. Compliance with the emission limitations specified in Specific Condition J.7. will be determined using DEP Method 9. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Chapter 62-297, F.A.C.

[Rules 62-297.401(9)(c), 62-297.310(4), 62-296.411(1)(j)(1), F.A.C., Air Construction Permit 1050055-013-AC]

J.12. Method 9 VE Test. The Method 9 visible emission (VE) compliance test(s) shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The opacity 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)(2), F.A.C., Air Construction Permit 1050055-013-AC]

J.13. Test Notification. The permittee shall notify the Air Compliance Section of this office at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted.

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

J.14. 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

J.15. Recordkeeping. In order to document compliance with Specific Conditions J.1., J.2., and J.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]

J.16. 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.

J.17. 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]

J.18. 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]

J.19. 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]

APPENDIX CAM

Compliance Assurance Monitoring Requirements

Mosaic Phosphates Company
South Pierce Facility

Facility ID No: 1050055

Compliance Assurance Monitoring Requirements

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

40 CFR 64.6 Approval of Monitoring.

1. The attached CAM plan(s), as submitted by the applicant, is/are approved for the purposes of satisfying the requirements of 40 CFR 64.3.
[40 CFR 64.6(a)]
2. The attached CAM plan(s) include the following information:
 - (i) The indicator(s) to be monitored (such as temperature, pressure drop, emissions, or similar parameter);
 - (ii) The means or device to be used to measure the indicator(s) (such as temperature measurement device, visual observation, or CEMS); and
 - (iii) The performance requirements established to satisfy 40 CFR 64.3(b) or (d), as applicable.[40 CFR 64.6(c)(1)]
3. The attached CAM plan(s) describe the means by which the owner or operator will define an exceedance of the permitted limits or an excursion from the stated indicator ranges and averaging periods for purposes of responding to (see **CAM Conditions 5. - 9.**) and reporting exceedances or excursions (see **CAM Conditions 10. – 14.**).
[40 CFR 64.6(c)(2)]
4. The permittee is required to conduct the monitoring specified in the attached CAM plan(s) and shall fulfill the obligations specified in the conditions below (see **CAM Conditions 5. - 17.**).
[40 CFR 64.6(c)(3)]

40 CFR 64.7 Operation of Approved Monitoring.

5. Commencement of operation. The owner or operator shall conduct the monitoring required under this appendix upon the effective date of this Title V permit.
[40 CFR 64.7(a)]
6. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
[40 CFR 64.7(b)]
7. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times

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

[40 CFR 64.7(c)]

8. Response to excursions or exceedances.

- a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions, if allowed by this permit). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

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

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

[40 CFR 64.7(e)]

40 CFR 64.8 Quality Improvement Plan (QIP) Requirements.

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

pollutant-specific emissions unit is being maintained and operated in a manner consistent with good air pollution control practices.
[40 CFR 64.8(a)]

11. Elements of a QIP:

- a. The owner or operator shall maintain a written QIP, if required, and have it available for inspection.
- b. The plan initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
 - (i) Improved preventive maintenance practices.
 - (ii) Process operation changes.
 - (iii) Appropriate improvements to control methods.
 - (iv) Other steps appropriate to correct control performance.
 - (v) More frequent or improved monitoring (only in conjunction with one or more steps under **CAM Condition 11.b(i)** through **(iv)**, above).

[40 CFR 64.8(b)]

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

[40 CFR 64.8(c)]

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

- a. Failed to address the cause of the control device performance problems; or
- b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

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

[40 CFR 64.8(e)]

40 CFR 64.9 Reporting And Recordkeeping Requirements.

15. General reporting requirements.

- a. On and after the date specified in **CAM Condition 5.** by which the owner or operator must use monitoring that meets the requirements of this appendix, the owner or operator shall submit monitoring reports semi-annually to the permitting authority in accordance with Rule 62-213.440(1)(b)3.a., F.A.C.
- b. A report for monitoring under this part shall include, at a minimum, the information required under Rule 62-213.440(1)(b)3.a., F.A.C., and the following information, as applicable:

- (i) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- (ii) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- (iii) A description of the actions taken to implement a QIP during the reporting period as specified in **CAM Conditions 10. through 14.** Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)]

16. General recordkeeping requirements.

- a. The owner or operator shall comply with the recordkeeping requirements specified in Rule 62-213.440(1)(b)2., F.A.C. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to **CAM Conditions 10. through 14.** and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this part (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements.

[40 CFR 64.9(b)]

40 CFR 64.10 Savings Provisions.

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

- a. Excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act. The requirements of this appendix shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to title I of the Act. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
- b. Restrict or abrogate the authority of the Administrator or the permitting authority to impose additional or more stringent monitoring, recordkeeping, testing, or reporting requirements on any owner or operator of a source under any provision of the Act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable.
- c. Restrict or abrogate the authority of the Administrator or permitting authority to take any enforcement action under the Act for any violation of an applicable requirement or of any person to take action under section 304 of the Act.

[40 CFR 64.10]

Emissions Unit 022

**No. 2 Ball Grinding System
Particulate Matter controlled by a Bag Collector**

Monitoring Approach

| | |
|--|---|
| 1. Indicator | Indicator 1 |
| Measuring Approach | Pressure Drop across the bag collector Pressure drop across the bag collector measured with a differential pressure transducer |
| 2. Indicator Range | An excursion is defined as any 1 hour average excluding those events defined as startup, shutdown and malfunctions, pressure drop outside of the following range: dP > 3.0 dP < 7.0 Excursions trigger an inspection, corrective action, and reporting requirement. The corrective action must be conducted to restore the flow rate to within the permitted range and assist in preventing future scrubber malfunctions from occurring. |
| A. Representative Data | All CAM-required instrumentation meets or exceeds the accuracy required by the regulations for this plant. The monitoring points are located per the manufacturers' recommendations and/or best engineering practices guidelines. |
| B. QA/QC Practices and Criteria | Calibration and maintenance are performed annually or on an as-needed basis. Instrument readings are observed on a continuing basis and any reading outside the normal operating range for this plant is investigated. This includes verification that the proper signal is being produced and that the instrumentation is working properly. Any necessary maintenance is performed and the instrument re-calibrated, as necessary. |
| C. Monitoring Frequency | All parameters are monitored continuously. |
| 4. Data Collection | Pressure drop is electronically recorded at least every 15-minutes measured by the differential pressure transducer. |
| Procedures | |
| 5. Averaging Period | All parameters are averaged in 15-minute blocks. These 15-minute blocks are then averaged to produce a 1hr averaging period. |

Emissions Unit 023

**GTSP Production Plant
Particulate Matter Controlled by Two Venturi Scrubbers and one packed-bed
Scrubber**

Monitoring Approach

**1. Indicator
Measuring
Approach
2. Indicator Range**

Indicator 1

Max and Min Fan Amps
Fan Amps are measured with an installed
Amp Meter

An excursion is defined as any 1 hour
average excluding those events defined as
startup, shutdown and malfunctions, flow
rate outside of the following range:

RGCV Scrubber: 7.4 - 7.5 in H₂O
Dryer Scrubber: 9.7 - 9.8 in H₂O
Tailgas Scrubber: 7.8 - 8.4 in H₂O

Excursions trigger an inspection,
corrective action, and reporting
requirement. The corrective action must
be conducted to restore the flow rate to
within the permitted range and assist in
preventing future scrubber malfunctions
from occurring.

**A. Representative
Data**

All CAM-required instrumentation meets
or exceeds the accuracy required by the
regulations for this plant. The
monitoring points are located per the
manufacturers recommendations and/or
best engineering practices guidelines.
Calibration and maintenance are
performed annually or on an as-needed
basis. Instrument readings are observed
on a continuing basis and any reading
outside the normal operating range for
this plant is investigated. This includes
verification that the proper signal is being
produced and that the instrumentation is
working properly. Any necessary
maintenance is performed and the
instrument re-calibrated, as necessary.

**B. QA/QC
Practices and
Criteria**

**C. Monitoring
Frequency
4. Data Collection
Procedures**

5. Averaging Period

All parameters are monitored
continuously.
All parameters are averaged in 15-minute
blocks based on data collected by the
Amp Meter.
All parameters are averaged in 15-minute
blocks. These 15-minute blocks are then
averaged to produce a 1hr average.

Indicator 2

Max and Min Liquid Flow Rate
Liquid Flow is measured with an
installed Flow Meter

An excursion is defined as any 1 hour
average excluding those events defined
as startup, shutdown and malfunctions,
flow rate outside of the following range:

RGCV Scrubber: 702 - 735 gpm
Dryer Scrubber: 717 - 725 gpm
Tailgas Scrubber: 5044 - 5064 gpm

Excursions trigger an inspection,
corrective action, and reporting
requirement. The corrective action must
be conducted to restore the flow rate to
within the permitted range and assist in
preventing future scrubber malfunctions
from occurring.

All CAM-required instrumentation meets
or exceeds the accuracy required by the
regulations for this plant. The
monitoring points are located per the
manufacturers recommendations and/or
best engineering practices guidelines.
Calibration and maintenance are
performed annually or on an as-needed
basis. Instrument readings are observed
on a continuing basis and any reading
outside the normal operating range for
this plant is investigated. This includes
verification that the proper signal is
being produced and that the
instrumentation is working properly.
Any necessary maintenance is performed
and the instrument re-calibrated, as
necessary.

All parameters are monitored
continuously.
All parameters are averaged in 15-minute
blocks based on data collected by the
Flow Meter.
All parameters are averaged in 15-minute
blocks. These 15-minute blocks are then
averaged to produce a 1hr average.

Emissions Units 024 and 025

**GTSP East Storage Building
Particulate Matter Controlled by Scrubber System consisting of Wet Cyclonic
Scrubbers**

Monitoring Approach

Indicator 1

Max and Min Fan Amps for each scrubber

Fan Amps are measured with an installed Amp Meter

An excursion is defined as any 1 hour average excluding those events defined as startup, shutdown and malfunctions, flow rate outside of the following range:

Fan 1

Max Amps >22

Min Amps < 20

Fan 2

Max Amps > 25

Min Amps < 23

Excursions trigger an inspection, corrective action, and reporting requirement. The corrective action must be conducted to restore the flow rate to within the permitted range and assist in preventing future scrubber malfunctions from occurring.

All CAM-required instrumentation meets or exceeds the accuracy required by the regulations for this plant. The monitoring points are located per the manufacturers recommendations and/or best engineering practices guidelines.

Calibration and maintenance are performed annually or on an as-needed basis. Instrument readings are observed on a continuing basis and any reading outside the normal operating range for this plant is investigated. This includes verification that the proper signal is being produced and that the instrumentation is working properly. Any necessary maintenance is performed and the instrument re-calibrated, as necessary.

All parameters are monitored continuously.

All parameters are averaged in 15-minute blocks based on data collected by the Amp Meter.

All parameters are averaged in 15-minute blocks. These 15-minute blocks are then averaged to produce a 1hr average.

- 1. Indicator**
- Measuring Approach**
- 2. Indicator Range**

A. Representative Data

B. QA/QC Practices and Criteria

C. Monitoring Frequency

4. Data Collection Procedures

5. Averaging Period

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MOSAIC PHOSPHATES COMPANY (MOSAIC)
SOUTH PIERCE FACILITY
Facility No. 1050055

COMPLIANCE PLAN CP-1

1. The facility is in compliance with all emission limits contained in 40 CFR 63 Subparts A, AA and BB ("Phosphate MACTs"), except as provided in condition 6 of this compliance plan for the GTSP Storage Building.
2. As of the date of issuance of this draft Title V permit renewal, the Department has determined the facility is a major source of hazardous air pollutants ("HAPs") and is subject to the provisions of the Phosphate MACTs. However, Mosaic will conduct testing as set forth herein and may request the Department reconsider its major source status. For purposes of reconsideration of major source status as described herein, Mosaic shall: (1) submit a quantification of all hazardous air pollutants (HAP) reasonably believed, on the basis of either previous testing or process knowledge, to be emitted in significant quantities from the facility and (2) conduct representative pond testing and modeling (if modeling is required for quantification of fugitive emissions) for total fluorides and hydrogen fluorides with sufficient samples to meet a data quality objective that accounts for the variability of test data and provides for confidence in the mean measured value. As part of this reconsideration, the Department reserves its right to base its determination upon hydrogen fluoride and/or total HAP emissions. Mosaic shall submit an approvable test protocol for Hydrogen Fluoride ("HF") pond emissions and qualification for all HAPs to the Department by April 30, 2005. Once the test protocol has been agreed upon by representatives of both the Department and Mosaic, both parties agree to abide by the results, in conjunction with the stack test data in 4, below, with regard to applicability of the HF MACT for South Pierce, provided the tests comply with the approved protocol and the tests yield valid results. The Department reserves the right to witness the testing, and to reject any test data obtained that is not according to the test protocol.
3. Within 30 days of written approval of the test protocol from the Department or issuance of FINAL permit 1050055-014-AV, which ever is earlier, Mosaic shall conduct the test for HF pond emissions in accordance with the approved test protocol.
4. Within 30 days of completing the pond tests, Mosaic shall submit results to the Department's

Bureau of Air Monitoring and Mobile Sources (BAMMS). Mosaic also shall submit the last 5 (five) years of stack test reports for all permitted emissions units emitting HAPs previously submitted to the Southwest District office or to BAMMS. The Department reserves the right to request additional testing.

5. In the event the data and test results demonstrate and the Department determines that the facility is not Major for HAPs, including HF, the following deadlines will apply:
 - a. Within 10 days of the Department's written determination, Mosaic shall request that the Department re-open FINAL Permit 1050055-014-AV to remove all HF MACT language from the permit.
 - b. Within 30 days of the Department's determination, Mosaic will begin testing on units subject to 40 CFR 64, Compliance Assurance Monitoring ("CAM") to establish scrubber operating parameters for Emissions Units No. 008, No. 009, No. 023, No. 024, and No. 025.
 - c. Within 45 days of Mosaic completing testing to establish scrubber operating parameters, Mosaic shall submit a report of the test results and a revised CAM plan to the Department. The revised CAM plan will include all units subject to CAM for both Particulate Matter and/or Fluoride (Emissions Units (EU) No. 008, No. 009, No. 023, No. 024, and No. 025).
6. In the event the data and test results demonstrate and the Department determines that the facility is major for HAPs, including HF, the following deadlines will apply:
 - a. Within 60 days of the Department's written determination, Mosaic shall submit a construction permit application to upgrade the affected scrubbers located at the facility's GTSP Storage Building to comply with the Phosphate MACT, 40 CFR 63 Subpart BB.
 - b. Within 30 days of Mosaic completing construction on the GTSP storage building to meet the requirements of the Phosphate MACT, Mosaic shall conduct initial performance testing to establish ranges of acceptable scrubber operation and to show compliance for the upgraded GTSP Storage system, as specified in 40 CFR 63 Subpart BB.
 - c. Within 45 days of Mosaic conducting initial performance testing to establish ranges of acceptable scrubber operation according to the MACT monitoring requirements specified in 40 CFR 63 Subpart BB for the GTSP storage building, Mosaic shall submit a report of the initial performance testing to the Department and EPA.
7. In addition to the requirements in paragraph 6, above, in the event the data and test results demonstrate and the Department determines that the facility is major for HAPs, including HF,

the following deadlines will apply:

- a. Within 120 days of the Department's decision, Mosaic shall install the monitoring devices on all emissions units subject to the MACT monitoring specified in 40 CFR 63 Subparts AA and BB. Mosaic shall provide written notice to the Department confirming such installations;
 - b. Within 30 days of the installation of the monitoring devices required by the MACT monitoring in 40 CFR 63 Subparts AA and BB, Mosaic shall initiate data collection into electronic storage for all continuous monitoring parameters and have in operation a data management and reporting system for all required components of the MACT monitoring in 40 CFR 63 Subparts AA and BB. Mosaic shall provide written notice to the Department confirming such data collection, management and storage;
 - c. Within 30 days of the installation of the monitoring devices required by 40 CFR 63 Subparts AA and BB, Mosaic shall conduct initial performance testing to establish ranges of acceptable scrubber operation and to show compliance for the upgraded GTSP Storage system;
 - d. Within 45 days of Mosaic conducting initial performance testing to establish ranges for applicable emissions units as required by MACT monitoring specified in 40 CFR 63 Subparts AA and BB, Mosaic shall submit a report of the initial performance testing to the Department and EPA as required by 40 CFR 63 Subparts A, AA, and BB. Thereafter, Mosaic shall submit semiannual reports required by the Phosphate MACTs, 40 CFR 63 Subparts A, AA, and BB.
8. Mosaic shall notify the Department in writing, within 15 days after the date specified for requirements not met, corrective measures adopted and an explanation of any measures not met by the completion date for the milestone or for compliance. All reports shall be accompanied by a certification, signed by a responsible official, in accordance with subsection 62-213.420(4), F.A.C.

Not federally enforceable.

Attachment A.

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

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

1. Only one sulfuric acid plant at a facility should be started up and burning sulfur at a time, There are times when it will be acceptable for more than one sulfuric acid plant to be in the start-up mode at the same time, provided the following condition is met. It is not acceptable to initiate sulfur burning at one sulfuric acid plant when another plant at the same facility is emitting SO₂ at a rate in excess of the emission limits imposed by the permit or rule, as determined by the CEMs emission rates for the immediately preceding 20 minutes.

2. A plant start-up must be at the lowest practicable operating rate, not to exceed 70 percent of the designated operating rate, until the SO₂ monitor indicates compliance, Because production rate is difficult to measure during start-up, if a more appropriate indicator (such as blower pressure, furnace temperature, gas strength, blower speed, number of sulfur guns operating, etc.) can be documented, tested and validated, the Department will accept this in lieu of directly documenting the operating rate. Implementation requires the development of a suitable list of surrogate parameters to demonstrate and document the reduced operating rate on a plant-by-plant basis. Documentation that the plant is conducting start-up at the reduced rate is the responsibility of the owner or operator.

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

4. Cold Start-Up Procedures.

a. Converter.

(1) The inlet and outlet temperature at the first two masses of catalyst shall be sufficiently high to provide immediate ignition when SO₂ enters the masses. In no event shall the inlet temperature to the first mass be less than 800°F or the outlet temperature to the first two masses be less than 700°F. These temperatures are the desired temperatures at the time the use of auxiliary fuel is terminated.

(2) The gas stream entering the converter shall contain SO₂ at a level less than normal, and sufficiently low to promote catalytic conversion to SO₃.

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H₂SO₄.

5. Warm Restart.

a. Converter.

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

- (1) The first two catalyst masses inlet and outlet temperatures must be at a minimum of 700°F; or
- (2) Two of the four inlet and outlet temperatures must be greater than or equal to 800°F; or
- (3) The inlet temperature of the first catalyst must be greater than or equal to 600°F and the outlet temperature greater than or equal to 800°F. Also, the inlet and outlet temperatures of the second catalyst must be greater than or equal to 700°F.

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

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

b. Absorbing Towers.

The concentration, temperature and flow of circulating acid shall be as near to normal conditions as reasonably can be achieved. In no event shall the concentration be less than 96 percent H₂SO₄.

6. Shutdown and Restart of Sulfuric Acid Plant #10 (Emissions Unit No. 004) after a Sulfur Pump Trip.

- a. The Low Blower Discharge Pressure Interlock, which cannot be bypassed, at approximately 30-40 inches of pressure will be used to trip the sulfur pump.
- b. The Distributive Control System (DCS) will be used to read and record sulfur pump amps to alert operators in the event of a sulfur pump trip. The DCS will have an event indication that the Low Blower Discharge Pressure Bypass Switch has been engaged.
- c. Utilize the Sulfuric Acid Plant Warning Siren in the event of any plant trip of the blower or sulfur systems.
- d. Follow the procedures in the Process Safety Management Procedure entitled "Shutdown and Startup of Sulfuric Acid Plant No. 010 after a Sulfur Pump Trip".

SULFURIC ACID PLANT SHUTDOWN CHECKLIST

DATE: _____

PLANT: _____

VISUAL VERIFICATION THAT FURNACE FIRE IS OUT W/BLOWER AT 1800 rpms BY
 _____ (COMMUNICATE WITH CHIEF) TIME _____

PURGE FOR AT LEAST TWO MINUTES AFTER VERIFICATION OF FURNACE FIRE WITH
 BLOWER AT MINIMUM GOVERNOR. TRIP BLOWER WHEN STACK OXYGEN IS OBSERVED
 TO BE INCREASING. Leave all the sulfur valves open until the blower is shut down.

IF PLANT TRIPS AND SULFUR REMAINS IN THE FURNACE AFTER THE BLOWER IS SHUT-
 DOWN, NOTIFY THE SUPERINTENDENT, PRODUCTION MGR, OR OPERATIONS MANAGER.

1. BLOWER DISCHARGE BYPASS ^{*} ON _____ OFF _____
2. HRS DILUTER CONCENTRATION BYPASS ON _____ OFF _____
3. HRS CORROSION MONITOR BYPASS ON _____ OFF _____
4. BLOWER/TURBINE DSH VALVED IN _____ OUT _____
5. SULFUR GUNS CLOSED _____ OPEN _____
6. BOILER CONTINUOUS AND SAMPLE LINE CLOSED _____ OPEN _____
7. CHEMICAL FEED PUMPS OFF _____ ON _____
8. 93% PRODUCT VALVE CLOSED _____ OPEN _____
9. DILUTION WATER VALVES CLOSED _____ OPEN _____
10. C.I.L. COOLER WATER VALVES CLOSED _____ OPEN _____
11. HRS PRE-HEATER WATER DISCHARGE VALVE CLOSED _____ OPEN _____
12. BLOWER DISCHARGE GATE VALVE CLOSED _____ OPEN _____
13. FURNACE INLET DAMPER CLOSED _____ OPEN _____
14. WHB EXIT DAMPER CLOSED _____ OPEN _____
15. ECONOMIZER DAMPERS CLOSED _____ OPEN _____
16. HX HOT GAS DAMPERS CLOSED _____ OPEN _____
17. HX COLD GAS DAMPERS CLOSED _____ OPEN _____

rev 9/16/2003

* Manual bypass of auto trip for sulfur pumps

- | | | | | | |
|-----|------------------------------|--------|-------|--------|-------|
| 18. | HRS BOILER VENT | OPEN | _____ | CLOSE | _____ |
| 19. | HRS STEAM TO MP HEADER VALVE | CLOSED | _____ | OPEN | _____ |
| 20. | HRS BOILER CONDENSATE DRAINS | OPEN | _____ | CLOSED | _____ |
| 21. | MAB TURBINE CASE DRAINS | OPEN | _____ | CLOSED | _____ |
| 22. | C.I.L. ANITROL | OFF | _____ | ON | _____ |
| 23. | TG#2 EXTRACTION DSH VALVED | OUT | _____ | IN | _____ |
| 24. | DESUPERHEATER | OPEN | _____ | CLOSED | _____ |

STARTUP SEQUENCE: RECHECK ALL DAMPERS & VALVES

1. START-UP CALLS (NOTIFY LAB) _____
2. START-UP SIREN SOUNDED _____
3. START-UP TEMPERATURES PRINTED OUT & CONDITIONS MET (Acid circulation started) _____ (DISPLAYS: 10 OR 11)
4. OPEN TRIP & THROTTLE TO 5" H2O
AFTER ALL INTERLOCKS MET AND DAMPERS OPEN RPMS _____
5. OPEN SLIDE GATE & CHECK FOR FIRE IN FURNACE AT 600 rpms
THROUGH OIL-GUN PORT SIGHT GLASS BY _____
6. IF THERE IS FIRE, CLOSE TRIP & THROTTLE. RENOTIFY ALL AREAS, CARGILL, SULFURIC SUPERINTENDENT, PRODUCTION MGR OR OPERATIONS MGR. IF THERE IS NO FIRE AT 600 rpms, PROCEED WITH NORMAL STARTUP ROUTINE.
7. PUT BLOWER ON GOVERNOR CONTROL.
8. OPEN ONE SULFUR GUN. START PUMP.
9. BRING FURNACE TEMP UP SLOWLY TO 1800°F, NO MORE THAN 50° PER MINUTE. STABILIZE THE PLANT AT 1800° AT LEAST 15 MINUTES (Temp, Blr Level, Blower at 1800RPMS, SO2 Stack in compliance) BEFORE PROCEEDING THROUGH CRITICAL. CONTINUE INCREASING FURN. TEMP 50°/MIN UNTIL PLANT IS AT DESIRED RATE. IN THE EVENT STACK SO2 EXCEEDS 800PPM ADVISE SUPERINTENDENT AND PRODUCTION MGR.

Appendix H-1, Permit History/ID Number Changes

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

E.U.:

| <u>ID No.</u> | <u>Description</u> | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1,2} |
|------------------------|---|----------------------------|-------------------|------------------------|-------------------------------------|
| <u>Revised Date(s)</u> | | | | | |
| -001 | 171 MMBtu Auxiliary Boiler | AC53-27465 | 03/14/80 | 7/30/80 | |
| | | AO53-186772 | 10/04/90 | 10/03/95 | |
| | | AO53-186772A | 12/20/95 | 08/15/96 | |
| | | 1050055-001-AC | 12/03/98 | 12/31/2000 | |
| -003 | Purified MAP/DAP Plant with Scrubber | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | | AO53-166758 | 12/08/89 | 12/05/94 | |
| -004 | Sulfuric Acid Plant #10 | AO53-101764 | 05/08/85 | 04/25/90 | |
| | | Amendment | 05/13/85 | 04/25/90 | |
| | | Amendment | 04/14/89 | 04/25/90 | |
| | | AC53-199112/ PSD-FL-179 | 04/17/92 | 01/01/94 | 07/01/95 |
| | | Amendment | 01/10/96 | 12/30/96 | |
| | | AO53-176685 | 06/26/90 | 06/21/95 | |
| | | AO53-221846 | 12/18/92 | 12/23/97 | |
| | | Amendment | 04/11/96 | 12/23/97 | |
| | | 1050055-010-AC | 09/17/97 | 06/30/00 | |
| | | PSD-FL-235 | | | |

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Not included in this table: Operating permits issued prior to 1988, ownership transfers, and construction permit time extensions for expired construction permits.

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Appendix H-1, Permit History/ID Number Changes

Mosaic Phosphates Company
South Pierce

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

E.U.

| <u>ID No.</u> | <u>Description</u> | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1, 2} |
|------------------------|------------------------------------|------------------------------|-------------------|------------------------|--------------------------------------|
| <u>Revised Date(s)</u> | | | | | |
| -005 | Sulfuric Acid Plant #11 | AO53-145510 | 05/05/88 | 04/21/93 | |
| | | Amendment | 04/17/89 | 04/21/93 | |
| | | AC53-199112/ PSD-FL-179 | 04/17/92 | 01/01/94 | 07/01/95 |
| | | Amendment | 01/10/96 | 12/30/96 | |
| | | AO53-220555 | 11/23/92 | 11/20/97 | |
| | | Amendment | 04/11/96 | 11/20/97 | |
| | | 1050055-010-AC PSD-FL-235 | 09/17/97 | 06/30/00 | |
| -008 | Phosphoric Acid Plant - A Train | AC53-34868 | 01/30/81 | 06/30/82 | |
| | | AO53-132657 | 06/23/87 | 06/18/92 | |
| | | Amendment | 02/19/88 | 06/18/92 | |
| | | AO53-212236 | 06/12/92 | 06/08/97 | |
| | | Amendment | 06/30/92 | 06/08/97 | |
| | | Amendment | 10/15/92 | 06/08/97 | |
| | | Amendment | 12/09/93 | 06/08/97 | |
| | | Amendment | 08/30/94 | 06/08/97 | |
| | | AO53-212236A | 01/12/96 | 06/08/97 | |
| | | 1050055-007-AC | 07/05/96 | 06/01/98 | |
| | | 1050055-009-AO | 11/21/96 | 06/01/98 | |
| -009 | Phosphoric Acid Plant - B Train | AO53-132658 | 06/23/87 | 06/18/92 | |
| | | Amendment | 02/19/88 | 06/18/92 | |

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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Appendix H-1, Permit History/ID Number Changes

Mosaic Phosphates Company
South Pierce

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

E.U.

| <u>ID No.</u> | <u>Description</u> | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1,2} |
|---------------|--------------------------|-------------------|-------------------|------------------------|-------------------------------------|
| | | | | | |
| | | AO53-212237 | 06/30/92 | 06/08/97 | |
| | | Amendment | 10/15/92 | 06/08/97 | |
| | | Amendment | 12/09/93 | 06/08/97 | |
| | | Amendment | 08/30/94 | 06/08/97 | |
| | | Amendment | 04/03/95 | 06/08/97 | |
| | | AO53-212237A | 01/12/96 | 06/08/97 | |
| | | I050055-007-AC | 07/05/96 | 06/01/98 | |
| | | 1050055-009-AO | 11/21/96 | 06/01/98 | |
| -012 | Purified MAP/DAP Plant | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | Storage Silo No. 3 | AO53-167460 | 12/08/89 | 12/05/94 | |
| -013 | Purified MAP/DAP Plant | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | Bagging Machine | AO53-167665 | 12/08/89 | 12/05/94 | |
| -014 | Purified MAP/DAP Plant | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | Bulk Truck Loading | AO53-167664 | 12/08/89 | 12/05/94 | |
| -022 | No. 2 Ball Mill Grinding | AO53-145509 | 05/05/88 | 04/21/93 | |
| | System | AO53-226427 | 05/13/93 | 05/15/98 | |
| | | AO53-226427A | 07/01/93 | 05/15/98 | |
| -023 | GTSP Production Plant | AO53-151947 | 10/14/88 | 09/26/93 | |
| | | Amendment | 01/03/89 | 09/26/93 | |

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Not included in this table: Operating permits issued prior to 1988, ownership transfers, and construction permit time extensions for expired construction permits.

Appendix H-1, Permit History/ID Number Changes

Mosaic Phosphates Company
South Pierce

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

| E.U. <u>ID No.</u> <u>Description</u> <u>Revised Date(s)</u> | | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1,2} |
|--|---|-------------------|-------------------|------------------------|-------------------------------------|
| | | AO53-235041 | 10/19/93 | 09/26/98 | |
| | | Amendment | 07/08/94 | 09/26/98 | |
| | | Amendment | 08/22/94 | 09/26/98 | |
| | | Amendment | 06/01/95 | 09/26/98 | |
| | | AO53-235041A | 07/19/95 | 09/26/98 | |
| | | AO53-235041B | 12/20/95 | 09/26/98 | |
| -024 | GTSP East Storage Building -North Scrubber | AC53-2184 | 06/07/73 | 11/01/74 | |
| | | AO53-151943 | 10/14/88 | 09/26/93 | |
| | | Amendment | 01/11/89 | 09/26/93 | |
| | | AO53-235039 | 10/19/93 | 09/26/98 | |
| | | AO53-235039A | 03/21/86 | 09/26/98 | |
| | | AO53-235039B | 07/19/95 | 09/26/98 | |
| -025 | GTSP East Storage Building -South Scrubber | AC53-2184 | 06/07/73 | 11/01/74 | |
| | | AO53-151945 | 10/14/88 | 09/26/93 | |
| | | Amendment | 03/01/89 | 09/26/93 | |
| | | AO53-235039A | 03/21/86 | 09/26/98 | |
| | | AO53-235039B | 07/19/95 | 09/26/98 | |
| | | | | | |
| -026 | GTSP Rock Hopper Bin | AO53-151942 | 09/16/88 | 09/12/93 | |
| | | AO53-234445 | 10/04/93 | 10/01/98 | |
| | | AO53-234445A | 11/08/93 | 10/01/98 | |

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Not included in this table: Operating permits issued prior to 1988, ownership transfers, and construction permit time extensions for expired construction permits.

Appendix H-1, Permit History/ID Number Changes

Mosaic Phosphates Company
South Pierce

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

| E.U. <u>ID No.</u> <u>Description</u> <u>Revised Date(s)</u> | | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1,2} |
|--|--|-------------------|-------------------|------------------------|-------------------------------------|
| -027 | Purified MAP/DAP Plant Storage Silo No. 2 | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | | AO53-167459 | 12/08/89 | 12/04/94 | |
| -028 | Purified MAP/DAP Plant Storage Silo No. 1 | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | | AO53-166759 | 12/08/89 | 12/05/94 | |
| -029 | Purified MAP/DAP Plant Bulk Railcar Loading | AC53-42155 | 07/17/81 | 12/15/82 | 7/15/84 |
| | | AO53-166760 | 12/08/89 | 12/05/94 | |

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

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Mosaic Phosphates Company
South Pierce

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

Permit History (for tracking purposes):

E.U.

| <u>ID No.</u> | <u>Description</u> | <u>Permit No.</u> | <u>Issue Date</u> | <u>Expiration Date</u> | <u>Extended Date</u> ^{1,2} |
|---------------|--|----------------------------|-------------------|------------------------|-------------------------------------|
| -030- 045 | Molten Sulfur Storage and Handling System | AC53-167779 | 12/14/89 | 01/01/91 | |
| | | AO53-187290 | 12/07/90 | 12/01/95 | |
| | | AC53-201152/ PSD-FL-179 | 04/17/92 | 01/01/94 | |
| | | Amendment | 01/10/96 | 12/30/96 | |
| | | AO53-221844 | 12/18/92 | 12/18/97 | |
| | | Amendment | 06/08/95 | 12/18/97 | |
| | | 1050055-010-AC | 09/17/97 | 06/30/00 | |
| | | PSD-FL-235 | | | |
| -050 | Molten Sulfur Transfer Pit | 1050055-013-AC | 6/17/2003 | 12/1/2004 | |

ID Number Changes (for tracking purposes):

From: Facility ID No.: 40TPA530055
To: Facility ID No.: 1050055

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

Not included in this table: Operating permits issued prior to 1988, ownership transfers, and construction permit time extensions for expired construction permits.

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

Mosaic Phosphates Company
South Pi rce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

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

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘exempt emissions units’.

E.U.

| <u>ID No.</u> | <u>Brief Description of Emissions Units and/or Activity</u> |
|----------------------|--|
| -049 | Fugitive PM/PM10 Sources |
| -049 | Fugitive SO2 Sources |
| -049 | Fugitive NOx Sources |
| -049 | Fugitive CO Sources |
| -049 | Fugitive VOC Sources |
| -049 | Fugitive Fluoride (F) Sources |

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

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-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

| E.U. ID No. | Pollutant Name | Fuel(s) | Hours/Yr | Allowable Emissions | | | Equivalent Emissions* | | Regulatory Citation(s) | See Permit Condition(s) |
|-------------|--|----------|----------|---|-----------|------|-----------------------|-------|---|-------------------------|
| | | | | Standard(s) | lbs./hour | TPY | lbs./hour | TPY | | |
| -001 | SO ₂ | Oil | 8,760 | 0.5% Sulfur by weight | | | 86.6 | 379.3 | AO53-186772 | III. A.2. |
| | VE | Nat. Gas | N/A | 20% opacity except | N/A | N/A | N/A | N/A | 62-296.406(1), F.A.C. | III. A.3. |
| | | Fuel Oil | | 27% for 6 min/hr | | | | | | |
| -004, 005 | SO ₂ | | 8,760 | Lesser of 4.0 lbs/ton of 100% acid produced or 500 lb/hr, or 1971 tons/yr | 500 | 2190 | 500 | 2190 | 40 CFR 60.82(a) BACT Determination, 4/17/92 62-204.800(7)(b)10, F.A.C. | III. B.2. |
| | H ₂ SO ₄ acid mist | | 8,760 | Lesser of 0.15 lbs/ton of 100% acid produced or 18.8 lb/hr, or 82.1 tons/yr | 18.8 | 82.1 | 18.8 | 82.1 | 40 CFR 60.82(a)(1) BACT Determination, 4/17/92 62-204.800(7)(b)10, F.A.C. | III. B.3. |
| | VE | | N/A | 10% opacity | N/A | N/A | N/A | N/A | 40 CFR 60.83(a)(2) 62-204.800(7)(b)10, F.A.C. | III. B.4. |
| | NO _x | | 8,760 | 0.12 lb/ton of 100% acid, 15.0 lbs/hr, 65.7 TPY | 15.0 | 65.7 | 15.0 | 65.7 | 1050055-010-AC/PSD-FL-235 BACT Determination, 9/15/97 | III. B.5. |
| -008, 009 | F (Fluoride) | | 8,760 | 0.02 lb/ton of P ₂ O ₅ , 1.11 lbs/hr | 1.11 | | 1.11 | 4.9 | AC53-34868, 40 CFR 60.202 | III.C.2. |

Notes: *The "Equivalent Emissions" listed are for informational purposes only.

N/A: Not Applicable EBA: Established By Applicant

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

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-022 No. 2 Ball Mill Grinding System
-023 GTSP Production Plant
-024 GTSP East Storage Building - North Scrubber System
-025 GTSP East Storage Building - South Scrubber System

| E.U. ID No. | Pollutant Name | Fuel(s) | Hours/Yr | Allowable Emissions | | | Equivalent Emissions* | | Regulatory Citation(s) | See Permit Condition(s) |
|-------------|----------------|-----------------|----------|---|-----------|-------|-----------------------|-------|--|-------------------------|
| | | | | Standard(s) | lbs./hour | TPY | lbs./hour | TPY | | |
| -022 | PM | | 8,760 | 31.8 lbs/hr, 139.2 tons/yr | 31.8 | 139.2 | 31.8 | 139.2 | 62-296.700(2)(b), F.A.C. | III. D.2. |
| | VE | | N/A | 20% opacity | N/A | N/A | N/A | N/A | 62-296.320(4)(b), F.A.C. | III. D.3. |
| -023 | PM | Nat. Gas Oil | 8,760 | 35 lbs/hr, 153 tons/yr, Process weight | 35 | 153 | 35 | 153 | EBA / 62-296.320(4)(a), F.A.C. | III. E.3. |
| | F (Fluoride) | | 8,760 | 0.15 lb/ton of 100% P ₂ O ₅ 5.7 lbs/hr, 25 tons/yr | 5.7 | 25 | 5.7 | 25 | 62-296.700(2)(b), F.A.C. 62-296.403(1)(d)2, F.A.C. | III. E.4. |
| | VE | | N/A | 20% opacity | N/A | N/A | N/A | N/A | 62-296.320(4)(b), F.A.C. | III. E.5. |
| -024, 025 | PM | | 8,760 | 40.1 lbs/hr, 175.6 tons/yr (combined), Process weight | 40.1 | 175.6 | 40.1 | 175.6 | EBA / 62-296.700(2)(b), F.A.C. | III. F.2. |
| | F (Fluoride) | | 8,760 | 7.8 lbs/hr, 34.2 tons/yr (combined) | 7.8 | 34.2 | 7.8 | 34.2 | 62-296.320(4)(a)2, F.A.C. EBA / 62-296.403(2), F.A.C. | III. F.3. |
| | VE | | N/A | 20% opacity | N/A | N/A | N/A | N/A | 62-296.320(4)(b), F.A.C. | III. F.4. |

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

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

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-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 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

| E.U. ID No. | Pollutant Name | Fuel(s) | Hours/Yr | Allowable Emissions | | | Equivalent Emissions* | | Regulatory Citation(s) | See Permit Condition(s) |
|---|----------------|---------|----------|---------------------|-----------|-----|-----------------------|------|--------------------------------|-------------------------|
| | | | | Standard(s) | lbs./hour | TPY | lbs./hour | TPY | | |
| -026 | VE | | N/A | 20% opacity | N/A | N/A | N/A | N/A | 62-296.320(4)(b), F.A.C. | III. G.2. |
| | PM | | 8,760 | 22.5 lbs/hr | 22.5 | | 22.5 | 98.6 | EBA / 62-296.700(2)(b), F.A.C. | III. G.3. |
| -030, 031, 032 033, 035, 036, 037, 038, 039, 040, 041, 042 050 | VE | | N/A | 20% opacity | N/A | N/A | N/A | N/A | 62-296.411(1)(g), F.A.C. | III. H.2., III.J.7. |
| Notes: *The "Equivalent Emissions" listed are for informational purposes only. N/A: Not Applicable EBA: Established by Applicant | | | | | | | | | | |

Table 2-1, Summary of Compliance Requirements

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV

Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-001 Auxiliary Boiler
-004 Sulfuric Acid Plant #10
-005 Sulfuric Acid Plant #11
-008 Phosphoric Acid Plant - A Train

| E.U. ID No. | Pollutant Name or Parameter | Fuel(s) | Compliance Method | Testing Time Frequency | Frequency Base Date * | Min. Compliance Test Duration | CMS** | See Permit Condition(s) |
|-------------|--------------------------------------|---------|--------------------------------|-----------------------------------|--------------------------|----------------------------------|-------|-----------------------------|
| -001 | VE | Oil | DEP Method 9 | 180 days after startup, annual | initial startup | 1 hour | | III. A.4, A.5, A.6, & A.7. |
| | VE | Oil | DEP Method 9 | 4 hours | | 6 min | | III. A.8. |
| | SO ₂ | Oil | fuel analysis, and sampling | annual | 1-April | | | III. A.12 & A.13. |
| -004 | SO ₂ | | 8 | annual | 1-October | 1 hour | yes | III. B.7, B.8, B.10 & B.11. |
| | H ₂ SO ₄ (SAM) | | 8 | annual | 1-October | 1 hour | | III. B.7. & B.8. |
| | VE | | 9 | annual | 1-October | 1 hour | | III. B.7., B.8. & B.9. |
| | NO _x | | 7E | annual | 1-October | 1 hour | | III. B.7. & B.8. |
| -005 | SO ₂ | | 8 | annual | 3-October | 1 hour | yes | III. B.7, B.8, B.10 & B.11. |
| | H ₂ SO ₄ (SAM) | | 8 | annual | 3-October | 1 hour | | III. B.7. & B.8. |
| -008 | VE | | 9 | annual | 3-October | 1 hour | | III. B.7., B.8. & B.9. |
| | NO _x | | 7E | annual | 3-October | 1 hour | | III. B.7. & B.8. |
| | F (Fluoride) | | 13A or 13B | annual | 16-April | 1 hour | | III. C.3. & C.4. |
| | Pressure drop | | | | | | yes | III. C.6. & C.10. |
| | Water flow rate | | | | | | | III. C.6. |
| | Mass flow rate | | | | | | | III. C.9. |

Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

**CMS [=] continuous monitoring system

Table 2-1, Summary of Compliance Requirements

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV
Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-009 Phosphoric Acid Plant - B Train
-022 No. 2 Ball Mill Grinding System
-023 GTSP Production Plant

| E.U. ID No. | Pollutant Name or Parameter | Fuel(s) | Compliance Method | Testing Time Frequency | Frequency Base Date * | Min. Compliance Test Duration | CMS** | See Permit Condition(s) |
|---|--------------------------------|----------|----------------------|---------------------------|-------------------------------|----------------------------------|-------|----------------------------|
| -009 | F (Fluoride) | | 13A or 13B | annual | 5-June | 1 hour | yes | III. C.3. & C.4. |
| | Pressure drop | | | | | | | III. C.6. & C.10. |
| | Water flow rate | | | | | | | III. C.6. |
| | Mass flow rate | | | | | | | III. C.9. |
| -022 | VE | 9 | 9 | annual | 2-March | 1 hour | | III. D.4, D.5. & D.6. |
| | PM | 5 | 5 | five years | 60 days prior to exp. date | 1 hour | | III. D.5. & D.6. |
| | Pressure drop | | | | | | | III. D.7. |
| -023 | PM | Gas, Oil | 5 | annual | 22-April | 1 hour | | III. E.6. & E.7. |
| | F (Fluoride) | | 13A or 13B | annual | 22-April | 1 hour | | III. E.6. & E.7. |
| | VE | 9 | 9 | annual | 22-April | 1 hour | | III. E.6., E.7. & E.8. |
| | Pressure drop | | | | | | | III. E.11., & E.13. |
| | Liquid flow rate | | | | | | | III. E.11., & E.13. |
| Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. **CMS [=] continuous monitoring system | | | | | | | | |

Table 2-1, Summary of Compliance Requirements

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV

Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-024 GTSP East Storage Building - North Scrubber System
-025 GTSP East Storage Building - South Scrubber System
-026 GTSP Rock Hopper Bin

| E.U. ID No. | Pollutant Name or Parameter | Fuel(s) | Compliance Method | Testing Time Frequency | Frequency Base Date * | Min. Compliance Test Duration | CMS** | See Permit Condition(s) |
|---|---|---------|----------------------|----------------------------|---|----------------------------------|-------|--|
| -024, 025 | PM F (Fluoride) VE Fan amperages | | 5 13A or 13B 9 | annual annual annual | 23-August 23-August 23-August | 1 hour 1 hour 1 hour | | III. F.5. & F.6. III. F.5. & F.6. III. F.5. & F.6. III. F.7., F.8. & F.9. |
| -026 | VE PM Pressure drop | | 9 5 | annual five years | 15-March 60 days prior to exp. date | 30 minutes 1 hour | | III. G.4. & G.6. III. G.5. & G.6. III.G.7. |
| | | | | | | | | |
| | | | | | | | | |
| Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. **CMS [=] continuous monitoring system | | | | | | | | |

Table 2-1, Summary of Compliance Requirements

Mosaic Phosphates Company
South Pierce Facility

DRAFT Permit No.: 1050055-014-AV

Facility ID No.: 1050055

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

E.U. ID No. Brief Description

-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

| E.U. ID No. | Pollutant Name or Parameter | Fuel(s) | Compliance Method | Testing Time Frequency | Frequency Base Date * | Min. Compliance Test Duration | CMS** | See Permit Condition(s) |
|---|--------------------------------|---------|----------------------|---------------------------|--------------------------|----------------------------------|-------|---|
| -030, 031, 032 | VE | | DEP Method 9 | initial | with 60 days | 30 minutes | | III. H.4., H.5. & H.6., J.7., J.10., J.11., & J.12. |
| 033, 034, 035 | | | | | of issuance | | | |
| 036, 037, 038 | | | | | of permit | | | |
| 039, 040, 041 | | | | five years | 60 days prior | 30 minutes | | III. H.4., H.5., H.6., H.7., J.7., J.10., J.11., & J.12. |
| 042, 043, 044 | | | | | to exp. date | | | |
| 045, 050 | | | | | | | | |
| Notes: *Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. **CMS [=] continuous monitoring system | | | | | | | | |

**FIGURE 1--SUMMARY REPORT-- GASEOUS AND OPACITY EXCESS EMISSION AND
MONITORING SYSTEM PERFORMANCE (version dated 7/94)**

Pollutant (*Circle One*): SO₂ NO_x TRS H₂S CO Opacity

Reporting period dates: From _____ to _____

Company: _____

Emission Limitation: _____

Address: _____

Monitor Manufacturer: _____

Model No.: _____

Date of Latest CMS Certification or Audit: _____

Process Unit(s) Description: _____

Total source operating time in reporting period ¹: _____

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

(footnotes on next page)

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

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

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

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

Name: _____

Signature: _____ Date: _____

Title: _____

[electronic name: figure1.doc]