White Springs Agricultural Chemicals, Inc.
Suwannee River/Swift Creek Complex
Facility ID No.: 0470002
Hamilton County

Title V Air Operation Permit Revision

FINAL Permit No.: 0470002-075-AV
Revision to Title V Air Operation Permit No.: 0470002-060-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Northeast District
7825 Baymeadows Road
Jacksonville, Florida 32256

Telephone: 904/807-3300
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Title V Air Operation Permit Revision

FINAL Permit No.: 0470002-075-AV
Revision to Title V Air Operation Permit No.: 0470002-0460-AV

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Please Note that Defluorinated Phosphate (DFP) is the new name for Pollyphos, which is a registered trademark of Occidental Chemical and, therefore, can no longer be used by White Springs Agricultural Chemicals.

Florida Department of Environmental Protection
Northeast District
7825 Baymeadows Way, Suite B200
Jacksonville, Florida 32256-7590

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Permittee:
White Springs Agricultural Chemicals, Inc.
Suwannee River/Swift Creek Complex

FINAL Permit No.: 0470002-075-AV
Facility ID No.: 0470002
SIC No(s).: 2874
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating air construction permit numbers: 0470002-054-AC extended in project 0470002-056-AC, 0470002-061-AC, 0470002-064-AC, 0470002-066-AC, 0470002-069-AC, 0470002-072-AC, 0470002-073-AC and 0470002-074-AC.

This existing facility is located at 15843 SE 78th Street, White Springs, Hamilton County; UTM coordinates: Zone 17, 328.3 km East and 3368.8 km North; and, Latitude: 30° 26′ 27″ North and Longitude: 82° 47′ 16″ West.

This Title V Air Operation Permit Revision 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:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-6, TITLE V CONDITIONS version dated 06/23/06
APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96
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Memorandum of Understanding for Sulfuric Acid Plants
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Alternative Monitoring Plan dated 10/4/04
40 CFR PART 63 Subpart A- Combined General Provisions for Subparts AA and BB – Phosphoric Acid Manufacturing and Phosphate Fertilizers Production Plants
40 CFR PART 60 Subpart A- General Provisions
Appendix CP-3, Compliance Plan

Initial Effective Date: June 4, 2007
Revision Effective Date: May 31, 2011
Renewal Application Due Date: December 7, 2011
Expiration Date: June 4, 2012

Christopher L. Kirts, P.E.
District Program Administrator

CLK: lm

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

Monique Jordan

_____ 6/1/2011
(Clerk) (Date)

Section I. Facility Information.

Subsection A. Facility Description.

This facility processes phosphate rock to produce several products at the Suwannee River/Swift Creek Complex (two plants). The facility consists of one rock grinder, two phosphoric acid plants, two defluorinated phosphate (DFP) plants, one dical process, two diammonium phosphate (DAP) plants, one monoammonium (MAP)/DAP storage building, one MAP/DAP screen/shipping building, four sulfuric acid plants, two phosphoric acid filters, four superphosphoric acid plants, one green superphosphoric plant, the Swift Creek Mine (SCM) rock dryer, and one acid clarification plant. The facility also has storage silos associated with the Swift Creek Mine and the DFP plant.

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

Based on the Title V Air Operation Permit Revision application received March 20, 2008, this facility **is** a major source of hazardous air pollutants (HAPs).

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

Sub-section	E.U. ID No.	Brief Description
A.	001	#2 Phosphate Rock Grinder
B.	003	"A" Defluorinated Phosphate (DFP) Plant
C.	004	X-Train (Dical process)
D.	008	"Y" Train-#1 Diammonium Phosphate (DAP) Plant
E.	010	#1 Monoammonium (MAP)/DAP/Storage Building
F.	015	MAP/DAP Shipping and Screening Facility
G.	020	"B" Phosphoric Acid Plant
H.	021	"C" Sulfuric Acid Plant
I.	022	"D" Sulfuric Acid Plant
J.	032	Z-Train (#2 DAP)
K.	034	South Phosphoric Acid Filters
L.	035	North Phosphoric Acid Filters
M.	036	"A" and "B" Superphosphoric Acid Plants
N.	038	"B" Defluorinated Phosphate (DFP) Plant
O.	039	"C" Auxiliary Boiler
P.	040	"D" Auxiliary Boiler
Q.	042	DFP Feed Prep
R.	044	"A" and "B" DFP Coolers
S.	054	Molten Sulfur System
T.	061	Green Superphosphoric Plant
U.	062	Defluorinated Phosphate (DFP) Silos

V.	064	Swift Creek Mine (SCM) Rock Dryer
W.	065	Swift Creek Mine Silos Mineral Storage and Conveyor System
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants
EE.	---	Common Conditions - Used Oil/Lead
FF.	---	Common Conditions - F.A.C. Test Requirements`
GG.	---	Common Conditions – 40 CFR 63 Subpart AA Monitoring and Testing Requirements
HH.	---	Common Conditions – 40 CFR 63 Subpart BB Monitoring and Testing Requirements
II.	---	Common Conditions – F.A.C. Excess Emissions Rules

Permitting Note: The following emissions units are permanently shutdown: EU-006 (SRM silos), EU-009 (SRM East Dryer), EU-013 (SRM Rock Grinder), EU-016 (#1 SRCC Phosphate Rock Grinder, EU-017 (SRM West Rock Dryer), and EU-041 (Dical Acid Prep).

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

Subsection C. Relevant Documents.

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

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

These documents are on file with the permitting authority:
Initial Title V Permit Application received 06-13-96
Initial Title V Permit Application Attachments received 03-24-97
Application for a Title V Air Operation Permit Revision received October 4, 2010
Waiver of 90-day Time Clock received December 8, 2010

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX-TV, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX-TV, 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. No person shall 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 10162
Fairfax, VA 22038
Telephone: 703) 227-7650

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. White Springs Agricultural Chemicals, Inc., shall comply with the Compliance Plan attached at Appendix CP-3.

[Rule 62-213.440(2), F.A.C.]

7. [RESERVED]

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

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

9. Not federally enforceable. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

Facility
The particulate matter on roadways and any storage piles shall be controlled from entrainment into the air by moisture applications if necessary.

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

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.}

10. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which is day one. Monthly reports will be defined as the beginning of each month, and quarterly will be defined as the beginning of each calendar quarter.

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

11. Startup, Shutdown, Malfunction Plan. The Permittee shall adopt and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction. The plan shall meet the requirements of 40 CFR 63.6(e)(3) including containing a program of corrective action for malfunctioning processes and the air pollution control and monitoring equipment used to comply with the relevant standards of 40 CFR Part 63. The current SSM Plan shall be maintained at the facility and be available for inspection and copying by the Administrator upon request. If the SSM Plan is subsequently revised pursuant to 40 CFR 63.6(e)(3)(viii), the Permittee shall maintain at the facility each previous (i.e., superseded) version of the SSM Plan, and shall make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by 40 CFR 63.6(e), shall not be deemed to constitute a Part 70 or 71 permit revision. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield.

Note: This condition is applicable to Emissions Units 008, 020, 032, 036, 064, 069, and 070.

[40 CFR 63.6(e)]

12. This facility shall comply with all the applicable requirements of 40 CFR Part 63, Subparts AA and BB, National Emissions Standards for Hazardous Air Pollutants Phosphoric Acid Manufacturing and Phosphate Fertilizers Production. This facility shall also comply with the General Provisions of 40 CFR 63 Subpart A, as applicable.

13. This facility shall comply with all the applicable requirements of the Alternative Monitoring Plan dated October, 4, 2004.

14. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted 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.}

15. 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.]

16. Submittals. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Department's Northeast District, Air Section:

Florida Department of Environmental Protection
Northeast District Office, Air Program
7825 Baymeadows Way, Suite B-200
Jacksonville, Florida 32256-7590
Telephone: 904/807-3300
Fax: 904/448-4363

17. 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

Section III. Emissions Unit(s) and Conditions.

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

E.U. ID No.	Brief Description
001	#2 Phosphate Rock Grinder

#2 Phosphate Rock Grinder controlled by a Bag Collector to control particulate matter. CAM does not apply for particulate matter.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

A.1. Permitted **Capacity**. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 TPH of Phosphate Rock, Dry Basis or Maximum Daily 1-Hour Average Rate = 45 TPH of Phosphate Rock, Dry Basis.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153; Permit No. 0470002-034-AC]

A.2. Hours **of Operation**. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AO24-166153]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

A.3. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 22.03 lbs/hr and 96.5 TPY.

[Permit No. AO24-20269; Permit No. AO24-166153]

A.4. Visible **Emissions**. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Permit No. AO24-20269; Permit No. AO24-166153]

Test Methods and Procedures

{Permitting note: 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.}

A.5. Test **Methods.** Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed on request.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-90783; Permit No. AO24-166153]

A.6. Test **Methods.** Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-20269]

Common Conditions - F.A.C. Test Requirements

A.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
003	"A" Defluorinated Phosphate (DFP) Plant

"A" DFP Plant with fluoride and particulate matter emissions are controlled by a Cross-Flow Packed Scrubber (13A). CAM does apply to this emission unit for fluoride, particulate matter and sulfur dioxide.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Permitted **Capacity**. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit 0470002-034-AC]

B.2. Methods **of Operation**. Natural gas shall be the fuel fired in this emissions unit.

[Rule 62-213.410, F.A.C.]

B.3. Hours **of Operation**. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

B.4. Total **Fluoride**. Total Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY.

[Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]

B.5. Particulate Matter. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY.

[Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]

B.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY.

[Construction Permit No. AC24-255802]

B.7. Visible **Emissions**. Visible Emissions shall not exceed 40% opacity.

[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-15084 amended 6/28/88; Construction Permit No. AC24-255802]

Compliance Assurance Monitoring (CAM) Requirements

B.8. Compliance **Assurance Monitoring (CAM).** This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Excess Emissions

B.9. The Permittee shall meet the Excess Emissions Rules stated in Common Conditions II.1., II.4.- II.6.

Test Methods and Procedures

{Permitting note: 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.}

B.10. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

B.11. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

B.12. Sulfur Dioxide. Sulfur Dioxide Emissions stack test method shall be EPA Method 6/6C incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal.

The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 003 is 8.00 pounds per hour and 35.04 tons per year.

[Rule 62-297.310(7)(a), F.A.C.; Rule 62-297.401(6), F.A.C.; Air Construction Permit No. 0470002-040-AC; Admin. Correction No. 0470002-035-AV]

B.13. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

B.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
004	X-Train (Dical Process)

X-Train (Dical Process) with emissions controlled from EP (Emissions Points) by the following control devices: 1) X-Train with Venturi and Cyclonic Scrubbers, 2) Dedust bin with Baghouse, 3) Shipping area with Baghouse, 4) Limestone silo with Baghouse, EP04 Unloading of limestone from the existing limestone storage silo back into trucks for other uses, 5) Reclaim bin with Baghouse, and 6) Material Handling with Baghouse. CAM does not apply for particulate matter or fluoride.

Limestone Storage Silo: Operation of the limestone storage silo located in EU No. 004, identified as Emission Point No. 04. The silo receives limestone pneumatically from a tanker truck, stores the limestone and then discharges the limestone to the X-Train process. This process also e unloads limestone from the silo into a tanker truck for other uses. Displaced air and PM emissions from the truck loading will be vented back into the silo. Particulate matter (PM) emissions from displaced air in the silo are controlled by a Flex-Kleen Baghouse, Model No. 100-WRB-48, with a stated cloth area of 576 square feet, and a nominal air flow of 2750 actual cubic feet per minute (ACFM).

[Application No. 0470002-072-AC]

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 tons of product or Maximum Daily 1-Hour Average Rate = 45 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

C.2. Methods of Operation are as follows:

Mode 1 - Dical (dicalcium phosphate) with 18.5% P is produced.
Mode 2 - Dical (dicalcium phosphate) with 21.0% P is produced.
Mode 3 - The transfer of Monocal or Dical from railcar to trucks.

Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%.

Mode 3. This is a non-production Mode involving the transfer of Monocal or Dical from railcars to the Dical silos for further transfer to trucks using a portion of the existing X-Train transfer equipment. The associated pollution control equipment **shall be operated normally during any loading operations**.

[Rule 62-213.410, F.A.C., Air Construction Permit No. 0470002-066-AC and Air Construction Permit No. 0470002-072-AC]

C.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}
{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 01 (X-Train)
Mode 1:

C.4. Total Fluoride. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY.

[Rule 62-296.403(2), F.A.C.]

C.5. Particulate Matter. Particulate Matter Emissions shall not exceed 46.11 lbs/hr and 201.96 TPY.

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

C.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From PSD FL-083]

C.7. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Emission Point 01 (X-Train)
Mode 2:

C.8. Total Fluoride. Total Fluoride emissions shall not exceed 0.63 lb/hr and 2.76 TPY.

[Rule 62-296.403(2), F.A.C.]

C.9. Particulate Matter. Particulate Matter Emissions shall not exceed 45.11 lbs/hr and 197.62 TPY.

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

C.10. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From PSD FL-083]

C.11. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Emission Point 02 (Dedust)
Modes 1 and 2:

C.12. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 03 (Shipping)
Modes 1 and 2:

C.13. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 04 (X-Train)

The silo has a storage capacity of 2000 tons of limestone. The applicant shall operate the baghouse (including the fan) at all times that the limestone is being loaded into the silo, unloaded from the silo, or discharged into the X-Train process.

[Rule 62-4.070(3), F.A.C. and Application No. 0470002-072-AC]

C.14. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C., Air Permit No. 0470002-072-AC]

Emission Point 05 (Reclaim Bin)
Modes 1 and 2:

C.15. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 06 (Fugitive Dust)
Modes 1 and 2:

C.16. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Air Construction Permit No. 0470002-038-AC; Rule 62-296.320(4)(b), F.A.C.; and Rule 62-297.620(4), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

Emission Point 01 (X-Train)
Modes 1 and 2:

C.17. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.]

C.18. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

C.19. Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

C.20. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 02 (Dedust)
Modes 1 and 2:

C.21. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 03 (Shipping)
Modes 1 and 2:

C.22. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 04 (Limestone Silo)
Modes 1 and 2:

C.23. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. Annual VE testing shall be performed for a minimum period of 30 minutes while the silo is being loaded from a tanker truck or during the loading of a tanker truck from the silo.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C., Rule 62-4.070, F.A.C., and Air Permit No. 0470002-072-AC]

Emission Point 05 (Reclaim Bin)
Modes 1 and 2:

C.24. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Emission Point 06 (Fugitive Dust)
Modes 1 and 2:

C.25. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - On-Spec Used Oil/Lead

C.26. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

Common Conditions - F.A.C. Test Requirements

C.27. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Emission Point 01 (X-Train)
Mode 3:

C.28. **Visible Emissions**. Visible Emissions shall not exceed 5% opacity.

{Permitting Note: The railcar Monocal or Dical will be a finished product that has already been screened for dust prior to shipment. There should be little dust associated with this Mode of operation.}

[Rule 62-297.620(4), F.A.C., Air Construction Permit No. 0470002-066-AC]

C.29. **Visible Emissions.** Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

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

E.U. ID No.	Brief Description
008	Y-Train (No. 1 Diammonium Phosphate (DAP) Plant)

The Y Train DAP/MAP Plant is permitted for input rate of 36.33 TPH of P_2O_5 feed. The plant is capable of producing fertilizer by five different modes (Mode 1: DAP by Split Flows of 30% & 50% P_2O_5 phosphoric acid; Mode 2: DAP by 40% P_2O_5 acid; Mode 3: Triplesuperphosphate (TSP) – *no longer produced or permitted*; Mode 4: MAP by Split Flows of 30% & 50% P_2O_5 acid; Mode 5: MAP by 40% P_2O_5 acid; Mode 6: MAP by reacting ammonia and acid in two pipe reactors**.** The plant consists of the two separate pipe reactors (Mode 6), a tank reactor for the other modes, two pug mills, granulator, dryer, cooler, screens, mills, and other associated process equipment. Particulate matter, fluoride, and sulfur dioxide emissions are controlled by cyclones, venturi and cyclonic scrubbers. Emissions from the pipe reactors are vented to the reactor scrubber for ammonia removal and then to a pond water scrubber for fluoride control. The permittee conducted testing on the pond water scrubbers for CAM applicability. CAM does not apply for this emissions unit. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants. The inclusion of project 0470002-050-AC makes EU 008 subject to 40 CFR 60 Subpart V for DAP 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity.

a. The production rate for Modes 1-2 and 4-6 shall not exceed 60 tons of product per hour based on a 12-month rolling average (12-MRA Hourly Rate Maximum) or 66 tons of product per hour based on a one-hour daily rolling average. The P_2O_5 feed shall not exceed 36.33 tons per hour.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

b. The annual production rate for Mode 6 shall not exceed 525,600 tons of product per year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC; Construction Permit No. 0470002-050-AC]

D.2. Methods of Operation are as follows:

Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
Mode 2 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
Mode 4 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 INPUT) phosphoric acid.
Mode 5 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 INPUT phosphoric acid.
Mode 6 – MAP produced by reacting ammonia and acid in two pipe reactors.

Only one of the five operating modes shall be in operation at one time. Process fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.5%.

[Rule 62-213.410, F.A.C.; Construction Permit No. 0470002-050-AC]

D.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-050-AC]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 01

ALL MODES:
D.4. Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/ton), 2.18 lb/hr, and 9.54 TPY.

[40 CFR 63.622(a) and Air Construction Permit 0470002-050-AC]

MODES 1-2, 4- 5:
D.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.10 lbs/hr and 48.62 TPY.

[From 11/82 PSD model]

ALL MODES:
D.6. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

MODES 1 or 2:

D.7. Particulate Matter. Particulate Matter Emissions shall not exceed 33.33 lbs/hr and 145.99 TPY.

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

MODES 4, 5, or 6:
D.8. Particulate Matter. Particulate Matter Emissions shall not exceed 45.15 lbs/hr and 197.74 TPY.

[Rule 62-296.320(4)(a), F.A.C., and Air Construction Permit 0470002-050-AC]

Operating Requirements

D.9. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition HH.4.(1) or (2).

[Rule 62-204.800, F.A.C.; 40 CFR 63.624]

Monitoring Requirements

D.10. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

D.11. **P_2O_5 Feed**. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

D.12. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

D.13. The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in Common Conditions HH.1 – HH.3.

Test Methods and Procedures

{Permitting note: 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.}

Emission Point 01
ALL MODES:

D.14. Total Fluorides.

(a) The test method shall be EPA Method 13A or EPA Method 13B, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.

(b) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401(13), F.A.C.; Construction Permit No. 0470002-050-AC]

D.15. Total Fluorides. Total Fluorides. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in Common Conditions HH.5 – HH.7.

MODES 1, 2, 4 and 5:

D.16. Sulfur Dioxide. In lieu of stack testing, the Permittee shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

ALL MODES:

D.17. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401(5), F.A.C.; Construction Permit No. 0470002-050-AC]

D.18. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401(9), F.A.C.; Construction Permit No. 0470002-050-AC]

Notification, Recordkeeping, Reporting Requirements

D.19. The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in Common Conditions HH.8. – HH.10.

D.20. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB– Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and BB,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and BB,

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

D.21. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions D.9., HH.1. through HH.7. Have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart BB, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}

[40 CFR 63.631]

Common Conditions - On-Spec Used Oil/Lead

D.22. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

Common Conditions - F.A.C. Test Requirements

D.23. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

D.24. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
010	#1 Monoammonium (MAP)/ Diammonium Phosphate (DAP) Storage Building

The #1 Storage & Shipping building. Particulate matter emissions are controlled by a Buffalo wet scrubber when shipping Monocal or Dical or Defluorinated Phosphate (DFP) or DAP (Diammonium Phosphate) or MAP (Monoammonium Phosphate). CAM does not apply for particulate matter for this emission unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 175 tons of product or Maximum Daily 1-Hour Average Rate = 195 tons of product for each mode and only one mode at a time.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Air Construction Permit 0470002-034-AC]

E.2. Methods of Operation are as follows:

- DAP (Diammonium Phosphate), MAP (Monoammonium Phosphate), Monocal, Dical, DFP (Defluorinated Phosphate) Shipment

E.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

E.4. Particulate Matter. Particulate Matter Emissions shall not exceed 36.17 lbs/hr and 158.42 TPY.
[Rule 62-296.320(4)(a), F.A.C.]

E.5. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Test Methods and Procedures

{Permitting note: 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.}

E.6. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

E.7. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

E.8. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
015	MAP/DAP Shipping Facility

MAP (Monoammonium Phosphate) or DAP (Diammonium Phosphate) or Monocal or Dical or Defluorinated Phosphate (DFP) Shipping Facility. The MAP/DAP product is transported by front-end loaders from storage piles located in the MAP/DAP shipping and screening facility area into hoppers where product is sorted and transported to loading silos for railcar or truck loading. Particulate matter emissions from the MAP/DAP shipping and screening facility are controlled by a single cyclone in series with a Venturi wet scrubber. CAM does not apply for particulate matter for this emission unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

F.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 215 tons of product or Maximum Daily 1-Hour Average Rate = 240 tons of product for each mode and only one mode at a time. The modes are defined as the operating modes for the Dical Plant (EU 004), MAP/DAP Plants (EUs 008 and 032) and the DFP Plants (EUs 003 and 038).
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Air Construction permit No. 0470002-034-AC; air Construction Permit No. 0470002-042-AC]

F.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

F.3. Particulate Matter Emissions. Particulate Matter Emissions shall not exceed 40.41 lbs/hr and 177.00 TPY.

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

F.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Test Methods and Procedures

{Permitting note: 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.}

F.5. Test Methods. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years with a frequency base day of 09/15/94.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

F.6. Test Methods. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 09/15/94.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

F.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
020	"B" Phosphoric Acid Plant

"B" Phosphoric Acid Plant with fluoride emissions continuously controlled by 2 packed wet scrubbers (Stack B and C). CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 100 tons 100% P_2O_5 input. The operation rate shall not exceed 600,000 tons during any 12 consecutive months 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

G.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

G.3. Total Fluorides. Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent P_2O_5 feed, 1.20 lb/hr and 3.6 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a), and PSD-FL-297]
{Permitting Note: The limits are established in PSD-FL-297 and are more stringent than the MACT Standard.}

G.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

G.5. Stacks A, B, and C shall be subject to all process requirements of Phosphoric Acid Plant B. Phosphoric Acid Plants A and C will no longer produce phosphoric acid independently, however integral portions of both Phosphoric Acid Plants A and C will assist Phosphoric Acid Plant B to filter the phosphoric acid and control fluoride emissions. The Phosphoric Acid Plant A filter system, scrubber and stack will be used with B Phosphoric Acid Plant when additional filtering is required. Phosphoric Acid Plant A components will not operate independently or when Phosphoric Acid Plant B is not operating. Phosphoric Acid Plant C scrubber and stack will be used continuously with Phosphoric Acid Plant B to control emissions from the Phosphoric Acid Plant B production. Phosphoric Acid Plant C components will not operate independently or when Phosphoric Acid Plant B is not operating. The sum total of emissions from all three stacks (A, B, and C) shall comply with conditions G.3., G.4., and G.5. of this permit. Initial and annual testing must be in compliance with this permit.

[Application No. 0470002-053-AC (PSD-FL-297B) and Rules 62-4.070(3) and 62-210.200, F.A.C. (Definitions - Potential Emissions)]

Operating Requirements

G.6. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition GG.4(1) or (2).

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

Monitoring Requirements

G.7. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

G.8. P_2O_5 Feed. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

G.9. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

G.10. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

Test Methods and Procedures

{Permitting note: 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.}

G.11. Total Fluorides. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:

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

G.11 continued:

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

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:
P=Mp Rp
where:
Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]

G.12. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7.

G.13. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

G.14. Testing Requirements. The mass emissions from stacks A, B, and C shall comply with the limits in specific conditions G.1. and G.3., G.4., and G.5. Initial testing of stacks B and C are required under 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2, and annual tests are required until startup of Plant A phosphoric acid filter. Testing of stacks A, B, and C will be required annually upon startup of Plant A phosphoric acid filter and compliance has been met with 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2. The sum total of emissions from all three stacks (A, B, and C) shall comply with conditions G.3., G.4., and G.5. of this permit.

[Permit No. 0470002-053-AC (PSD-FL-297) and Compliance Plan CP-2]

Notification, Recordkeeping, Reporting Requirements

G.15. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

G.16. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA– Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and AA,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

G.15. continued:

6) All tests shall be submitted to the Department in accordance with Subparts A and AA,

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A, 40 CFR 63-Subpart AA, and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

G.17. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions G.6., GG.1 through GG.9 Have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T is no longer valid.}

[40 CFR 63.610]

<u>Common Conditions</u> - F.A.C. Test Requirements

G.18. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

<u>Common Conditions – General Provisions of 40 CFR 63</u>

G.19. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
021	"C" Sulfuric Acid Plant

"C" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions and has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

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

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

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The production rate shall not exceed 2300 TPD, expressed as 100 percent H_2S0_4 or 95.83 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402]

H.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-146402; Construction Permit No. 0470002-034-AC]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

H.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 383.33 lbs/hr and 1679.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-146402]

H.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-146402]

H.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-146402]

Test Methods and Procedures

{Permitting note: 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.}

H.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:

E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.

C = concentration of SO_2, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).

K = conversion factor, 1000 g/kg (1.0 lb/lb).

H.6 continued:

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in Condition H.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

H.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

H.7 continued:

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The acid mist emission rate is calculated as described in Condition H.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

H.8. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-146402]

Continuous Monitoring Requirements

H.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-146402]

H.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition H.9.

[40 CFR 60.84(b)]

H.11. All conversion factors and values under Condition H.10. from which they were computed (i.e., CF, r, and s) shall be recorded.
[40 CFR 60.84(c)]

H.12. Sulfur Dioxide Alternative. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition H.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$Es=(CsS)/[0.265 \cdot (0.126\ \%O_2) \cdot (A\ \%CO_2)]$
where:
Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

H.13. Sulfur Dioxide Excess Emissions. For the purpose of reports under 40 CFR 60.7(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 standards under Condition H.3.

[40 CFR 60.84(e)]

Common Conditions - F.A.C. Test Requirements

H.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
022	"D" Sulfuric Acid Plant

"D" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. This emissions unit has a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

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

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

Essential Potential to Emit (PTE) Parameters

I.1. Permitted Capacity. The production rate shall not exceed 2300 TPD expressed as 100 percent H_2SO_4 or 95.83 TPH.

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

I.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

I.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 383.33 lbs/hr and 1679.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a)]

I.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, 14.38 lbs/hr and 63.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1)]

I.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2)]

Test Methods and Procedures

{Permitting note: 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.}

I.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:

E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.

C = concentration of SO_2, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).

K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

I.6. continued:

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in Condition I.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

I.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:
E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

I.7. continued:

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).
(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.
(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.
(ii) The acid mist emission rate is calculated as described in Condition I.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.]

I.8. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

<u>Continuous Monitoring Requirements</u>

I.9. <u>Sulfur Dioxide</u>. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a)]

I.10. **Conversion Factor**. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition I.9.

[40 CFR 60.84(b)]

I.11. All conversion factors and values under **Condition I.10.** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c)]

I.12. **Sulfur Dioxide Alternative**. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition I.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

I.12 continued:

$Es=(CsS)/[0.265 \cdot (0.126\ \%O_2) \cdot (A\ \%CO_2)]$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

I.13. Sulfur Dioxide Excess Emissions. For the purpose of reports under 40 CFR 60.7(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 standards under Condition I.3.

[40 CFR 60.84(e)]

Common Conditions - F.A.C. Test Requirements

I.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
032	Z-Train – No. 2 Diammonium Phosphate (DAP) Plant

Z-Train (#2 DAP Plant) with two emissions points (EP). The first EP is the main part of DAP process which is controlled by several cyclones followed by several cyclonic and venturi scrubbers (EP TG). The cooler (EP C) is controlled by a cyclone and a venturi scrubber. CAM does not apply for this emissions unit. The permittee conducted testing on the pond water scrubbers for CAM applicability for particulate matter. Fluoride emissions are covered by the 40 CFR 63 Subpart BB and testing was done by the permittee to show the pond water scrubbers are not designed for PM control.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart V, Standards of Performance for the Phosphate Fertilizer Industry: Diammonium Phosphate Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)28., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; 62-212.400, F.A.C., Prevention of Significant Deterioration; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants. **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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

J.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 75 tons of product or Maximum Daily 1-Hour Average Rate = 83 tons of product. The P_2O_5 feed shall not exceed 41.1 Tons per hour.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-032-AC; Construction Permit No. 0470002-034-AC]

J.2. Methods of Operation are as follows:

Mode 1 - DAP (Diammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 2 - MAP (Monoammonium Phosphate) produced by Split Acid (30% & 50% P_2O_5 input) phosphoric acid.
Mode 3 - DAP (Diammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 4 - MAP (Monoammonium Phosphate) produced by 40% P_2O_5 input phosphoric acid.
Mode 5 - MAP produced by reacting ammonia and acid in two pipe reactors. The Z-Train has been modified to allow the producing of granular MAP using a pipe reactor as an alternate to the tank reactor.

Process fuels fired are natural gas, fuel oil with a maximum sulfur content of 1.00%, or on-spec used oil with a maximum sulfur content of 1.00%.

[Rule 62-213.410, F.A.C.]

J.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

ALL MODES:

From EP (TG):

J.4. Total Fluorides. Total Fluoride emissions shall not exceed 30 grams/metric ton of equivalent P_2O_5 feed (0.060 lb/ton); 2.18 lbs/hr and 9.50 TPY.

[Rule 62-204.800(7)27., F.A.C.; 40 CFR 60.222, 40 CFR 63.622(a)]

J.5. Particulate Matter. Particulate Matter Emissions shall not exceed 47.37 lbs/hr and 206.90 TPY.

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

J.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 11.80 lbs/hr and 51.50 TPY.

[Construction Permit No. AC24-56215/ PSD-FL-083]

J.7. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

From EP (C):

J.8. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.; Construction Permit No. 0470002-032-AC]

Operating Requirements

J.9. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of **Condition HH.6.(1) or (2).**

[Rule 62-204.800, F.A.C.; 40 CFR 63.624]

Monitoring Requirements

J.10. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(a)]

J.11. **P_2O_5 Feed**. The Permittee shall maintain a daily record of equivalent P_2O_5 feed...

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(b)]

J.12. **Scrubber Pressure Drop**. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.223(c)]

J.13. The Permittee shall meet the 40 CFR 63 Subpart BB monitoring requirements stated in Common Conditions HH.1 – HH.3.

Test Methods and Procedures

{Permitting note: 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.}

ALL MODES:

From EP (TG):

J.14. **Total Fluorides**. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.222 as follows:

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

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

J.14. continued:

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

$$P=Mp\ Rp$$

where:
Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.223(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorported by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.224; Rule 62-296.403(3), F.A.C.]

J.15. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart BB performance testing requirements stated in Common Conditions HH.5 – HH.7.

J.16. <u>Particulate Matter</u>. Particulate Matter emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.310(7)(a)4.b., F.A.C.; Rule 62-297.401, F.A.C.]

J.17. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions in lieu of stack testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually prior to March 1 of each year.

J.18. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

From EP (C):

J.19. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

Notification, Recordkeeping, Reporting Requirements

J.20. The Permittee shall meet the 40 CFR 63 Subpart BB notification, recordkeeping, and reporting requirements stated in Common Conditions HH.8. –HH.10.

J.21. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart BB, Appendix A to Subpart BB – Applicability to General Provisions to Subpart BB, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and BB,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and BB,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and BB,

J.21. continued:

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or BB, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart BB; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

Exemption from New Source Performance Standards.

J.22. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions J.9., HH.1. through HH.7. have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart BB, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V is no longer valid.}

[40 CFR 63.631]

<u>Common Conditions</u> - On-Spec Used Oil/Lead

J.23. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

<u>Common Conditions</u> - F.A.C. Test Requirements

J.24. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

<u>Common Conditions – General Provisions of 40 CFR 63</u>

J.25. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
034	South Phosphoric Acid Filters

The South Phosphoric Acid Filters has fluoride emissions which are controlled by a counter-current packed wet scrubber (D). Also, the storage and aging tanks are controlled by this scrubber. The "A" & "B" Superphosphoric Acid (SPA) Plants (EU 036) are ducted through, but not controlled by this scrubber. The filter aid and filter media emit particulate matter, and are controlled by a common bag collector (EF). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

K.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 44.68 tons of P_2O_5 input or Maximum Daily 1-Hour Average Rate = 50 tons P_2O_5 input. 12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

K.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

K.3. From stack (D), Fluoride emissions shall not exceed 0.05 lb FL per ton P_2O_5 INPUT; 2.23 lbs/hr and 9.80 TPY.

[Rule 62-210.200(42), F.A.C.; BACT]

K.4. From stack (EF), Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

K.5. Test Methods. From stack (D), Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

K.6. Test Methods. From stack (EF), Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

K.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
035	North Phosphoric Acid Filters consists of 6 rotary drum filters to filter 48% P_2O_5 Phosphoric Acid

North Phosphoric Acid Filters and storage tanks emit fluoride emissions, and are controlled by a counter-current packed wet scrubber (B). CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

L.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 92.8 tons of P_2O_5 input or Maximum Daily 1-Hour Average Rate = 102.1 tons P_2O_5 input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

L.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

L.3. Fluoride Emissions. Fluoride emissions shall not exceed 1.86 lbs/hr and 8.15 TPY.

[Permit #AC24-188960]

Test Methods and Procedures

{Permitting note: 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.}

L.4. Test Methods. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually during the federal fiscal year (October 1- September 30).

[Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

L.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection M this section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
036	"A" & "B" Superphosphoric Acid (SPA) Plants (Vacuum Evaporation Process)

"A" & "B" Superphosphoric Acid (SPA) Plants emit fluoride, and are ducted to the South Phosphoric Acid Filters counter-current packed wet scrubber (EU 034). Test for fluoride at EU 036 (SPA) is conducted upstream of the scrubber, in the connecting duct. CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid 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 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

M.1. Permitted Capacity. The operation rate shall not exceed:

- "A" SPA - the Maximum 12-MRA Hourly Rate = 42.1 tons of 100% P_2O_5 input or Maximum Daily 1-Hour Average Rate = 46.4 tons of 100% P_2O_5 input.
- "B" SPA - the Maximum 12-MRA Hourly Rate = 42.1 tons of 100% P_2O_5 input or Maximum Daily 1-Hour Average Rate = 46.4 tons of 100% P_2O_5 input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

M.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

M.3. Total Fluorides. Total Fluoride emissions at the sample port from both A & B SPA units combined shall not exceed 5.0 gram/metric ton of equivalent P_2O_5 feed (0.010 lb/ton); 0.84 lbs/hr and 3.68 TPY.

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1)]

Monitoring Requirements

M.4. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(a)]

M.5. **P_2O_5 Feed**. The Permittee shall maintain a daily record of equivalent P_2O_5 feed..

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

M.6. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

Test Methods and Procedures

{Permitting note: 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.}

M.7. <u>Total Fluorides</u>. (a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:

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

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

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

where:
Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.214]

M.8. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7 with the exception that testing shall be done every five years.
[Permit 0470002-033-AV, Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.214, Subpart U; Rule 62-297.401; F.A.C.]

Notification, Recordkeeping, Reporting Requirements

M.9. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

M.10. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and AA,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and AA,

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

Exemption from New Source Performance Standards.

M.10. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of **Conditions GG.1 through GG.9** Have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U is no longer valid.}

[40 CFR 63.610]

Common Conditions - F.A.C. Test Requirements

M.11. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

M.12. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
038	"B" Defluorinated Phosphate (DFP) Plant

"B" DFP Plant emits fluoride and particulate matter emissions, and is controlled by a Cross-Flow Packed Scrubber (13B). CAM applies for particulate matter, sulfur dioxide and fluoride.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

N.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

N.2. Methods of Operation. The authorized fuel to be fired shall be natural gas.

[Rule 62-213.410, F.A.C.]

N.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

N.4. Total Fluoride. Fluoride emissions shall not exceed 2.5 lbs/hr and 10.5 TPY.

[Rule 62-296.403(2), F.A.C.; Construction Permit No. AC24-255802]

N.5. Particulate Matter. Particulate Matter Emissions shall not exceed 14.05 lbs/hr and 59.00 TPY.
[Rule 62-296.320(4)(a), F.A.C.; Construction Permit No. AC24-255802]

N.6. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 8.00 lbs/hr and 35.04 TPY.

[Permit AC24-255802]

N.7. Visible Emissions. Visible Emissions are limited to 40% opacity.

[Rule 62-296.320(4)(b)2., F.A.C.; Construction Permit No. AC24-255802; Construction Permit No. AC24-15083 amendment dated 6/28/88]

Test Methods and Procedures

{Permitting note: 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.}

N.8. Total Fluoride. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.9. Particulate Matter. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-255802]

N.10. <u>Sulfur Dioxide</u>. Sulfur Dioxide Emissions testing shall comply with the applicable in requirements Rule 62-297.401(6), F.A.C. and be performed every 5 years prior to operation permit renewal

The 5-year testing frequency is justified by the low emission rate documented in previous emissions tests. The applicant has consistently presented test results that are more than 97% below the applicable standards. Furthermore, in accordance with Rule 62-297.310(7)(a)4.b., F.A.C., an annual Sulfur Dioxide compliance test is required if there is an applicable standard and if the emissions unit has a potential to emit 100 tons per year or greater. The permitted Sulfur Dioxide limit for Emissions Unit Number 038 is 8.00 pounds per hour and 35.04 tons per year.

[Air Construction Permit No. 0470002-040-AC]

N.11. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

<u>Compliance Assurance Monitoring (CAM) Requirements</u>

N.12. This emissions unit is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

<u>Common Conditions - F.A.C. Test Requirements</u>

N.13. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
039	"C" Auxiliary Boiler. This emissions unit shares a common stack with the "D" Auxiliary Boiler.

"C" Auxiliary Boiler has a design capacity of 120, 000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD), Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C.; and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than the previously submitted initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

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

Essential Potential to Emit (PTE) Parameters

O.1. Permitted Capacity. The heat input rate shall not exceed 155 MMBTU/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214; Amendment dated 3/22/85]

O.2. Methods of Operation. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil or on-spec used oil may be fired as stand-by fuels. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

O.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, 10.7 lbs/hr and 46.7 TPY when firing fuel oil.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.5. **Sulfur Dioxide**. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 563.9 TPY when firing fuel oil, and 0.1 lbs/hr and 0.3 TPY when firing natural gas.

[Rule 62-210.200(42), F.A.C., (BACT); Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil, and 21.0 lbs/hr and 92.0 TPY when firing natural gas.

[Construction Permit No. AC24-56214, PSD-FL-083]

O.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil, and 2.0 lbs/hr and 8.9 TPY when firing natural gas.

[Construction Permit No. AC24-56214, PSD-FL-083]

O.9. Volatile Organic Compounds. VOC emissions shall not exceed 0.8 lb per hour and 3.6 TPY when firing fuel oil, and 0.4 lbs/hr and 1.6 TPY when firing natural gas.

[Construction Permit No. AC24-56214, PSD-FL-083]

Test Methods and Procedures

{Permitting note: 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.}

O.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. O.4., if the unit complies with the Visible Emissions limitations stated in Condition No. O.6 and the fuel sulfur content restrictions stated in Condition No. O.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year. The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.
[Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated March 22, 1985]

O.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in Condition No. O.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56214, PSD-FL-083, Amendment dated 2/22/84]

O.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56214, PSD-FL-083]

O.13 Nitrogen Oxides. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

O.14. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

O.15. **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.]

O.16. Excess Emissions– Startup, Shutdown, Malfunction. Excess Emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.

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

O.17. Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

Common Conditions - On-Spec Used Oil/Lead

O.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

Common Conditions - F.A.C. Test Requirements

O.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
040	"D" Auxiliary Boiler. This emissions unit shares a common stack with "C" Auxiliary Boiler

"D" Auxiliary Boiler has a design capacity of 100,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 155 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for sulfur dioxide and particulate matter for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-083; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than the previously submitted initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

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

Essential Potential to Emit (PTE) Parameters

P.1. Permitted Capacity. The heat input rate shall not exceed 155 MMBTU/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, Amendment dated 3/22/85]

P.2. Methods of Operation. This emissions unit shall be fired primarily with natural gas. No. 6 fuel oil or on-spec used oil may be fired as a stand-by fuel. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

P.4. Particulate Matter. Particulate Matter Emissions shall not exceed 1.2 lbs/hr and 5.3 TPY when firing natural gas, and 10.7 lbs/hr and 47 TPY when firing fuel oil.

[Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(2), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 128.7 lbs/hr and 564 TPY when firing fuel oil and 0.1 lbs/hr and 0.3 TPY when firing natural gas.

[Rule 62-210.200(42), F.A.C.; BACT Determination dated 11/7/82; Rule 62-296.406(3), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1), F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 49.2 lb per hour and 215.5 TPY when firing fuel oil and 21.0 lbs/hr and 92.0 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

P.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 4.1 lb per hour and 18.0 TPY when firing fuel oil and 2.0 lbs/hr and 9 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

P.9. Volatile Organic Compounds. VOC emissions shall not exceed 0.8 lbs/hr and 4 TPY when firing fuel oil and 0.4 lbs/hr and 2 TPY when firing natural gas.

[Construction Permit No. AC24-56213, PSD-FL-083]

Test Methods and Procedures

{Permitting note: 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.}

P.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in Condition No. P.4., if the unit complies with the Visible Emissions limitations stated in Condition No. P.6 and the fuel sulfur content restrictions stated in Condition No. P.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated March 22, 1985, Applicant Request]

P.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in Condition No. P.2. The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance testing using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56213, PSD-FL-083, Amendment dated 2/22/84]

P.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56213, PSD-FL-083]

P.13 **Nitrogen Oxides**. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

P.14. **Carbon Monoxide**. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-083]

P.15. **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.]

P.16. **Excess Emissions– Startup, Shutdown, Malfunction**. Excess Emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.

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

P.17. Excess Emissions- Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

Common Conditions - On-Spec Used Oil/Lead

P.18. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE

<u>Common Conditions</u> - F.A.C. Test Requirements

P.19. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
042	Defluorinated Phosphate (DFP) Feed Prep

DFP Feed Prep consists of the following systems: The feed prep area where the limestone, phosphate rock, and other ingredients are mixed, the soda ash storage and handling system, and a limestone handling system. CAM does apply for particulate matter, sulfur dioxide and fluoride for this emissions unit.

The soda ash system consists of a pneumatic transfer system, which conveys soda ash from a vacuum railcar unloading hopper to a 330 ton storage silo (Emissions Point 06/ EP SA1). From this silo, soda ash is then transferred to a 20 tons soda ash bin/day tank (Emission Point 07/ EP SA2). A baghouse and bin filter control particulate Matter emissions from the silo and bin, respectively.

Limestone handling system: Limestone is unloaded via truck into a 50 ton storage silo (Emissions Point 04/EP L1) to a 3 ton limestone surge bin (Emissions Point 03/ EP L2). A baghouse and bin filter control particulate matter emissions from the silo and bin, respectively.

Remaining Emissions points are identified as Emissions Point 01 (Rock bin Baghouse), Emissions Point 02 (Baghouse), and Emissions Point 05 (Dryer wet scrubber). CAM does apply for particulate matter from the scrubber.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

Q.1.a. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 48.94 tons of input or Maximum Daily 1-Hour Average Rate = 54 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. 0470002-034-AC]

Emission Points 03 and 04/L1 and L2 Limestone System:

Q.1.b. Permitted Capacity – Limestone System. The maximum loading rate for the Limestone Silo (EP 03/EP L1) shall not exceed 50,000 lbs/hr. The maximum loading rate for the Limestone Surge bin (EP 04/EP L2) shall not exceed 10,000 lbs/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Permit No. AC24-191394]

Q.2. Methods of Operation are as follows:
Fuels fired are natural gas or fuel oil with a maximum sulfur content of 1.50%.

[Rule 62-213.410, F.A.C.]

Q.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year. The soda ash storage equipment may operate continuously. The soda ash silo vacuum pump (EP 06/EP SA1) operating hours shall not exceed 1800 hours per year. The soda ash bin blower/exhaust fan (EP 07/EP SA2) operating hours shall not exceed 2700 hours.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-165588]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Emission Point 05/ Feed Prep Scrubber:

Q.4. Particulate Matter. Particulate Matter Emissions shall not exceed 31.99 lbs/hr and 134.35 TPY.

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

Q.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 4.90 lbs/hr and 20.58.

[Used in a SO2 model]

Q.6. Visible Emissions. Visible Emissions shall not be equal to greater than 20% opacity.

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

Emission Point 02/ Baghouse:

Q.7. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 01/ Rock Bin:

Q.8. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 03/ L1 Lime Silo:

Q.9.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY.

[Construction Permit No. AC24-191394]

Q.9.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 04/ L2 Lime Bin:

Q.10.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.10 lbs/hr and 0.44 TPY.

[Construction Permit No. AC24-191394]

Q.10.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 06/ SA1 Soda Ash Silo:

Q.11.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.25 lb/hr and 0.23 TPY.

[Construction Permit No. AC24-165588]

Q.11b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Emission Point 07/ SA2 Soda Ash Bin:

Q.12.a. Particulate Matter. Particulate Matter emissions shall not exceed 0.02 lb/hr and 0.027 TPY.

[Construction Permit No. AC24-165588]

Q.12.b. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

Q.13. From EP 05, Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.]

Q.14. From EP 05, Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired and report annually once each federal fiscal year.

Q.15. From EP 05, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Q.16. From EP 02, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Q.17. From EP 01, Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Emission Point 03/ L1 Lime Silo:

Q.18.a. **Particulate Matter**. Compliance with the particulate matter limitation in **Condtion Q.9.** shall be demonstrated by compliance with the Visible emissions standard in **Condition Q.9.**

Q.18.b. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the silo is being loaded.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

Emission Point 04/ L2 Lime Bin:

Q.19.a. **Particulate Matter**. Compliance with the particulate matter limitation in **Condtion Q.10.** shall be demonstrated by compliance with the Visible emissions standard in Condition Q.10.

Q.19.b. **Visible Emissions**. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year. The test shall be conducted while the bin is being loaded.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-191394]

Emission Point 06/ SA1 Soda Ash Silo:

Q.20. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

Emission Point 07/ SA2 Soda Ash Bin:

Q.21. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Construction Permit No. AC24-165588]

Compliance Assurance Monitoring (CAM) Requirements

Q.22. Emission point EP05 is subject to the CAM requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.

[40 CFR 64; and, Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Common Conditions - F.A.C. Test Requirements

Q.23. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
044	"A" & "B" Defluorinated Phosphate (DFP) Coolers

"A" & "B" DFP Coolers emit particulate matter, and each are controlled by a cyclonic wet scrubber that exhaust through a common stack (EP 12). CAM does not apply for particulate matter and fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; and Rule 62-296.403, F.A.C., Phosphate Processing}

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

Essential Potential to Emit (PTE) Parameters

R.1. Permitted Capacity. The rate for each DFP Cooler "A" & "B" shall not exceed the Maximum 12-MRA Hourly Rate = 8.25 tons of product or Maximum Daily 1-Hour Average Rate = 10 tons of product.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

R.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

R.3. Fluoride emissions shall not exceed 1.42 lbs/hr and 5.96 TPY.

[Rule 62-296.403(2), F.A.C.; Permit No. AO24-31725]

R.4. **Particulate Matter**. Particulate Matter Emissions shall not exceed 25.04 lbs/hr and 105.17 TPY.

[Rule 62-296.320(4)(a), F.A.C.; AO24-31725]

R.5. **Visible Emissions**. Visible Emissions shall not be equal to or greater than 20% opacity.

[Rule 62-296.320(4)(b), F.A.C.; Permit No. AO24-31725]

Test Methods and Procedures

{Permitting note: 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.}

R.6. **Total Fluoride**. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.403(3), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

R.7. **Particulate Matter**. Particulate Matter Emissions stack test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(a), F.A.C.; Rule 62-297.401, F.A.C.; Permit No. AO24-31725]

R.8. **Visible Emissions**. Visible Emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

R.9. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
054	Molten Sulfur System for "C" & "D" Sulfuric Acid Plants

Molten Sulfur System for "C" & "D" Sulfuric Acid Plants consist of a rail & truck unloading system with transfer point venting, receiving pit, supply pit, and storage tank. The EU has an emission limitation for visible emissions. CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

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

Essential Potential to Emit (PTE) Parameters

S.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 77.08 tons of throughput or Maximum Daily 1-Hour Average Rate = 85 tons throughput.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages. Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

S.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

S.3. Molten sulfur transfer. 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 movable unloading areas and stationary pipes shall seat effectively around the entire circumference to minimize spillage.

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

S.4. Pipe disconnection point. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or tailraces 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 spill, that are adequate to contain amounts of sulfur that may escape during routine disconnection, reconnection or operation of the piping system.

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

S.5. Molten sulfur spills. 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.]

S.6. Vent surfaces. All vent surfaces shall be cleaned monthly to remove captured particles.
[Rule 62-296.411(1)(e)]

S.7. Visible Emissions. Visible Emissions from any emission point within this emissions unit shall not exceed 20% opacity (six minute average).

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

S.8. Operational procedures. Approved operational procedures, by the Department, shall be established to minimize spills from any moveable loading arm or pipe upon disconnection, reconnection or operation.

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

Test Methods and Procedures

{Permitting note: 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.}

S.9. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal.

[Rule 62-296.411(1)(j), F.A.C.; Rule 62-297.401, F.A.C.; Air Construction Permit No. AC24-171596; Title V Permit Revision No. 0470002-041-AV]

Recordkeeping and Reporting Requirements

S.10. All owners and operators of molten sulfur storage and handling facilities shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur. Such records shall be retained for a minimum of two years and shall be available for inspection by the Department upon request.

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

Common Conditions - F.A.C. Test Requirements

S.11. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
061	Green Superphosphoric Acid (SPA) Plant

Green Superphosphoric Acid (SPA) Plant emits fluoride emissions which are controlled by a cross-flow packed wet scrubber. This process changes the color of hot SPA from black to green using an oxidant. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

T.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 40 tons of 100% P_2O_5 input or Maximum Daily 1-Hour Average Rate = 44.0 tons of 100% P_2O_5 input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC, (Applicant requested on July 10, 2006 and August 7, 2006) Air Construction Permit No. 0470002-054-AC]

T.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

T.3. At sample port, fluoride emissions shall not exceed 0.2 lb/hr and 12.2 TPY.

[Requested by applicant; Permit #AC24-205170; and Air Construction Permit No. 0470002-054-AC]

Test Methods and Procedures

{Permitting note: 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.}

T.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

T.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
062	Defluorinated Phosphate (DFP) Product Silos

DFP Product Silos emit particulate matter, which is controlled by the following emissions points (EP); EP 14, Product sizing & crushing controlled by a baghouse, and EP 16, Product storage silos "A", "B" and "C" & shipping operations controlled by a baghouse. CAM does not apply for this emissions unit.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

U.1. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year, and shall be recorded.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-250411]

U.2. **Permitted Capacity**. The maximum total discharge rate from the three silos, Nos. A, B, and C, shall not exceed 100 TPH of DFP. One or more silos may discharge at the same time.

[Construction Permit No. AC24-250411]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

From EP 14:

U.3. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

From EP 16:

U.4. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.; Operation Permit No. AC24-226519]

Compliance Monitoring and Testing Requirements

{Permitting note: 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.}

From EP 14:

U.5. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit.

[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

From EP 16:

U.6. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C., and shall conduct a formal compliance test during each federal fiscal year (October 1 - September 30) unless otherwise specified by rule, order, or permit.

[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a, F.A.C.; Operation Permit No. AC24-226519]

Common Conditions - F.A.C. Test Requirements

U.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
064	Swift Creek Mine Rock Dryer

SCM Rock Dryer is a phosphate rock dryer, with a fluid bed exhausting through a two-stage wet cyclonic scrubber to control particulate matter emissions. CAM does not apply for particulate matter and sulfur dioxide for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

V.1. Permitted Capacity. The operation rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.
12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC]

V.2. Methods of Operation. It is fired primarily with natural gas. No. 6 fuel oil with sulfur content not to exceed 1.30 % which may contain on-spec used oil with sulfur content not to exceed 1.0 % is fired as fuel when natural gas is not available.

[Rule 62-213.410, F.A.C.]

V.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

V.4. Particulate Matter. Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.23 TPY.

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

V.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 38.10 lbs/hr and 166.88 TPY.

[Used in 02/81 model]

V.6. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Operating Requirements

V.7. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition GG.4. (1) or (2).

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

Monitoring Requirements

V.8. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

Test Methods and Procedures

{Permitting note: 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.}

V.9. Particulate Matter. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5, GG.6, and GG.8.

V.10. Sulfur Dioxide. Sulfur Dioxide Emissions in lieu of testing shall comply with the applicable requirements in Rule 62-297.440(1), F.A.C. or maintain a record of acceptable, certified analyses of all fuel oil fired. A report shall be submitted on an annual basis prior to 03/01 of each year.

V.11. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually, once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.]

Notification, Recordkeeping, Reporting Requirements

V.12. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

V.13. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and AA,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and AA,

V.13. continued:

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

Common Conditions - On-Spec Used Oil/Lead

V.14. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

Common Conditions - F.A.C. Test Requirements

V.15. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

V.16. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
065	Swift Creek Mine Silos

Swift Creek Mine Silos Mineral Storage and Conveyor System use a wet scrubber to control particulate matter emissions. CAM does not apply for particulate matter for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

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

Essential Potential to Emit (PTE) Parameters

W.1. Permitted Capacity. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 475 tons of input or Maximum Daily 1-Hour Average Rate = 525 tons of input.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC]

W.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

W.3. Particulate Matter. Particulate Matter Emissions shall not exceed 46.40 lbs/hr and 203.20 TPY.

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

W.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Test Methods and Procedures

{Permitting note: 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.}

W.5. Particulate Matter. Particulate Matter emissions test method shall be EPA Method 5 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(a)3., F.A.C.; Rule 62-297.401, F.A.C.]

W.6. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296. 320(4)(b)4., F.A.C.; Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

W.7. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
066	"E" Sulfuric Acid Plant

"E" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; and Rule 296.402, F.A.C., Sulfuric Acid Plants.}

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

Essential Potential to Emit (PTE) Parameters

X.1. Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent H_2SO_4 or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.
[Permit No. 0470005-004-AO and Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

X.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, and 416. 7 lb per hour, and 1820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56211, PSD-FL-082]

X.4. Sulfuric Acid Mist (SAM). SAM Emissions shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4, and 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56211, PSD-FL-082]

X.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56211, PSD-FL-082]

Test Methods and Procedures

{Permitting note: 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.}

X.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:
E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of SO_2, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

X.6. continued:

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in **Condition X.12.** substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.7. <u>Sulfuric Acid Mist</u>. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

X.7. continued:

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.
(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The acid mist emission rate is calculated as described in **Condition X.12.** substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

X.8. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56211, PSD-FL-082]

Continuous Monitoring Requirements

X.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-56211, PSD-FL-082]

X.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:

CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under Condition X.9.

[40 CFR 60.84(b); Construction Permit No. AC24-56211, PSD-FL-082]

X.11. All conversion factors and values under **Condition X.10.** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c)]

X.12. <u>Sulfur Dioxide Alternative</u>. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition X.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 \cdot (0.126\ \%O_2) \cdot (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

X.12. continued:

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From—	To—	Multiply by—
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

X.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(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 standards under Condition X.3.

[40 CFR 60.84(e); Construction Permit No. AC24-56211, PSD-FL-082]

Common Conditions - F.A.C. Test Requirements

X.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
067	"F" Sulfuric Acid Plant

"F" Sulfuric Acid Plant is a double absorption process that produces sulfuric acid and controls sulfur dioxide (SO_2) emissions. The emissions unit uses a Brinks mist eliminator to control sulfuric acid mist (SAM). CAM does not apply for sulfur dioxide for this emissions unit.

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

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

Essential Potential to Emit (PTE) Parameters

Y.1. Permitted Capacity. The production rate shall not exceed 2500 TPD, expressed as 100 percent H_2SO_4 or 104.20 TPH.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Y.3. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 2 kg per metric ton of acid produced (4 lb per ton), the production being expressed as 100 percent H_2SO_4, 416.67 lbs/hr and 1820.00 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.82(a); Construction Permit No. AC24-56209, PSD-FL-082]

Y.4. Sulfuric Acid Mist (SAM). SAM emissions, expressed as H_2SO_4, shall not exceed 0.075 kg per metric ton of acid produced (0.15 lb per ton), the production being expressed as 100 percent H_2SO_4,, 15.62 lbs/hr and 68.20 TPY.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(1); Construction Permit No. AC24-56209, PSD-FL-082]

Y.5. Visible Emissions. Visible Emissions shall not exceed 10% opacity.

[Rule 62-204.800(7)(b)10., F.A.C.; 40 CFR 60.83(a)(2); Construction Permit No. AC24-56209, PSD-FL-082]

Test Methods and Procedures

{Permitting note: 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.}

Y.6. Sulfur Dioxide. The following procedures and test methods shall be used to determine sulfur dioxide emissions. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfur dioxide shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

where:

E = emission rate of SO_2 kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.

C = concentration of SO_2, g/dscm (lb/dscf).

Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).

P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).

K = conversion factor, 1000 g/kg (1.0 lb/lb).

Y.6. continued:

(2) Method 8 shall be used to determine the Sulfur Dioxide concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The SO_2 emission rate is calculated as described in Condition Y.12. substituting the acid mist concentration for Cs as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.7. Sulfuric Acid Mist. The following procedures and test methods shall be used to determine sulfuric acid mist. A compliance test shall be conducted on an annual basis, once each federal fiscal year:

(a) The test methods in 40 CFR Appendix A or other methods and procedures as specified in this condition, except as provided in 40 CFR 60.8(b).

(b) (1) The emission rate (E) of sulfuric acid mist shall be computed for each run using the following equation:

$$E=(CQsd)/(PK)$$

Y.7. continued:

where:

E = emission rate of acid mist kg/metric ton (lb/ton) of 100 percent H_2SO_4 produced.
C = concentration of acid mist, g/dscm (lb/dscf).
Qsd = volumetric flow rate of the effluent gas, dscm/hr (dscf/hr).
P = production rate of 100 percent H_2SO_4, metric ton/hr (ton/hr).
K = conversion factor, 1000 g/kg (1.0 lb/lb).

(2) Method 8 shall be used to determine the Sulfuric Acid Mist concentration (C) and the volumetric flow rate (Qsd) of the effluent gas. The moisture content may be considered to be zero. The sampling time and sample volume for each run shall be at least 60 minutes and 1.15 dscm (40.6 dscf).

(3) Suitable methods shall be used to determine the production rate (P) of 100 percent H_2SO_4 for each run. Material balance over the production system shall be used to confirm the production rate.

(4) N/A

(c) The following may be used as alternatives to the reference methods and procedures specified in this condition:

(1) If a source processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen, the following procedure may be used instead of determining the volumetric flow rate and production rate:

(i) The integrated technique of Method 3 is used to determine the O_2 concentration and, if required, CO_2 concentration.

(ii) The acid mist emission rate is calculated as described in Condition Y.12. substituting the acid mist concentration for C as appropriate.

[40 CFR 60.85(a),(b),(c); Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.401, F.A.C.; Construction Permit No. AC24-56209, PSD-FL-082]

Y.8. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; 40 CFR 60.85(b)(4); Rule 62-297.401, F.A.C.]

Continuous Monitoring Requirements

Y.9. Sulfur Dioxide. A continuous monitoring system for the measurement of sulfur dioxide shall be installed, calibrated, maintained, and operated. The pollutant gas used to prepare calibration gas mixtures under Performance Specification 2 and for calibration checks under 40 CFR 60.13(d), shall be sulfur dioxide (SO_2). Method 8 shall be used for conducting monitoring system performance evaluations under 40 CFR 60.13(c) except that only the sulfur dioxide portion of the Method 8 results shall be used. The span value shall be set at 1000 ppm of sulfur dioxide.

[40 CFR 60.84(a); Construction Permit No. AC24-56209, PSD-FL-082]

Y.10. Conversion Factor. A conversion factor for the purpose of converting monitoring data into units of the applicable standard (kg/metric ton, lb/ton) shall be established. The conversion factor shall be determined, as a minimum, three times daily by measuring the concentration of sulfur dioxide entering the converter using suitable methods (e.g., the Reich test, National Air Pollution Control Administration Publication No. 999–AP–13) and calculating the appropriate conversion factor for each eight-hour period as follows:

$$CF = k[(1.000 - 0.015r)/(r - s)]$$

where:
CF = conversion factor (kg/metric ton per ppm, lb/ton per ppm).
k = constant derived from material balance. For determining CF in metric units, k=0.0653. For determining CF in English units, k=0.1306.
r = percentage of sulfur dioxide by volume entering the gas converter. Appropriate corrections must be made for air injection plants subject to the Administrator's approval.
s = percentage of sulfur dioxide by volume in the emissions to the atmosphere determined by the continuous monitoring system required under **Condition Y.9**.

[40 CFR 60.84(b); Construction Permit No. AC24-56209, PSD-FL-082]

Y.11. All conversion factors and values under **Condition Y.10.** from which they were computed (i.e., CF, r, and s) shall be recorded.

[40 CFR 60.84(c); Construction Permit No. AC24-56209, PSD-FL-082]

Y.12. **Sulfur Dioxide Alternative**. Alternatively, a source that processes elemental sulfur or an ore that contains elemental sulfur and uses air to supply oxygen may use the following continuous emission monitoring approach and calculation procedures in determining SO_2 emission rates in terms of the standard. This procedure is not required, but is an alternative that would alleviate problems encountered in the measurement of gas velocities or production rate. Continuous emission monitoring systems for measuring SO_2, O_2, and CO_2 (if required) shall be installed, calibrated, maintained, and operated by the owner or operator and subjected to the certification procedures in Performance Specifications 2 and 3. The calibration procedure and span value for the SO_2 monitor shall be as specified in Condition Y.9. The span value for CO_2 (if required) shall be 10 percent and for O_2 shall be 20.9 percent (air). A conversion factor based on process rate data is not necessary. Calculate the SO_2 emission rate as follows:

$$Es=(CsS)/[0.265 \cdot (0.126\ \%O_2) \cdot (A\ \%CO_2)]$$

where:

Es = emission rate of SO_2, kg/metric ton (lb/ton) of 100 percent of H_2SO_4 produced.
Cs = concentration of SO_2, kg/dscm (lb/dscf).
S = acid production rate factor, 368 dscm/metric ton (11,800 dscf/ton) of 100 percent H_2SO_4 produced.
$\%O_2$ = oxygen concentration, percent dry basis.
A = auxiliary fuel factor,
= 0.00 for no fuel.
= 0.0226 for methane.
= 0.0217 for natural gas.
= 0.0196 for propane.
= 0.0172 for No 2 oil.
= 0.0161 for No 6 oil.
= 0.0148 for coal.
= 0.0126 for coke.
$\%CO_2$ = carbon dioxide concentration, percent dry basis.

Y.12. continued:

NOTE: It is necessary in some cases to convert measured concentration units to other units for these calculations:

Use the following table for such conversions:

From —	To —	Multiply by —
g/scm	kg/scm	10^{-3}
mg/scm	kg/scm	10^{-6}
ppm (SO_2)	kg/scm	2.660×10^{-6}
ppm (SO_2)	lb/scf	1.660×10^{-7}

[40 CFR 60.84(d)]

Y.13. <u>Sulfur Dioxide Excess Emissions</u>. For the purpose of reports under 40 CFR 60.7(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 standards under Condition Y.3.

[40 CFR 60.84(e); Construction Permit No. AC24-56209, PSD-FL-082]

Common Conditions - F.A.C. Test Requirements

Y.14. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
068	"E" Auxiliary Boiler

"E" Auxiliary Boiler has a design capacity of 125,000 pounds per hour of steam. The produced steam is used to augment steam produced from the sulfuric acid plants to provide operating flexibility in the phosphoric acid production and evaporation process. The boiler is permitted to fire natural gas with No. 6 fuel oil as a stand-by fuel. The maximum heat input rate is 156 MMBTU/hr. Pollutants emitted are particulate matter, sulfur dioxide and visible emissions. CAM does not apply for particulate matter and sulfur dioxide.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units, Rule 212.400(5), F.A.C.; Prevention of Significant Deterioration (PSD): Permit No. PSD-FL-082; Rule 62-212.400(6), F.A.C., and Best Available Control Technology (BACT) Determination dated 11/7/82. Though subject to 40 CFR 63 Subpart DDDDD, I/C/I Boilers and Process Heaters, this emissions unit is considered to be an existing large gaseous fuel boiler and is not subject to any requirements, other than initial notification, unless it is reconstructed as defined in 40 CFR 63.2.}

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

Essential Potential to Emit (PTE) Parameters

Z.1. Permitted Capacity. The heat input rate shall not exceed 156 MMBTU/hr.

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

Z.2. Methods of Operation. This emissions unit shall be fired with natural gas, No. 6 fuel oil, or on-spec used oil. The sulfur content in the No. 6 fuel oil and the On-spec used oil shall not exceed 1.00% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

Z.3. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year when firing natural gas. When firing No. 6 fuel oil or on-spec used oil, the hours of operation for this emissions unit shall not exceed 8518 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

Z.4. Particulate Matter. Particulate Matter Emissions shall not exceed 13.90 lbs/hr and 59.2 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(2); Construction Permit No. AC24-56210, PSD-FL-082]

Z.5. Sulfur Dioxide. Sulfur Dioxide Emissions shall not exceed 1.1 lb per MMBtu heat input, and 170.70 lb per hour and 727.00 TPY.

[Rule 62-210.200(42), F.A.C., BACT Determination dated 11/7/82; Rule 62-296.406(3); Construction Permit No. AC24-56210, PSD-FL-082]

Z.6. Visible Emissions. Visible Emissions shall not exceed 20% opacity except 27% for one 6 min. period per hour.

[Rule 62-296.406(1); Construction Permit No. AC24-56210, PSD-FL-082]

Z.7. Nitrogen Oxides. Nitrogen oxides emissions shall not exceed 64.0 lb per hour. [Construction Permit No. AC24-56210, PSD-FL-082]

Z.8. Carbon Monoxide. Carbon Monoxide emissions shall not exceed 5.3 lb per hour.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.9. Volatile Organic Compounds. VOC emissions shall not exceed 1.1 lb per hour.

[Construction Permit No. AC24-56210, PSD-FL-082]

Test Methods and Procedures

{Permitting note: 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.}

Z.10. Particulate Matter. This emissions unit shall be assumed to be in compliance with the Particulate Matter emission limits stated in **Condition No. Z.4**, if the unit complies with the Visible Emissions limitations stated in **Condition No. Z.6** and the fuel sulfur content restrictions stated in **Condition No. Z.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct a particulate matter compliance test using EPA Method 5 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082, Amendment dated March 22, 1985]

Z.11. Sulfur Dioxide. In lieu of an annual compliance stack test for sulfur dioxide emissions, the Permittee shall comply with the fuel sulfur content restrictions stated in **Condition No. Z.2.** The sulfur content shall be verified using the standards established in Rule 62-297.440(1), F.A.C., or maintain a record of acceptable, certified analyses of all fuel oil fired and report on an annual basis prior to March 1 of each year.

The permittee shall conduct sulfur dioxide compliance test using EPA Method 6 upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082; Amendment dated February 22, 1984]

Z.12. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed annually, once each federal fiscal year.

[Rule 62-297.401, F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Construction Permit No. AC24-56210, PSD-FL-082]

Z.13 **Nitrogen Oxides**. The test method for nitrogen oxides shall be EPA Method 7, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.14. **Carbon Monoxide**. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C. A compliance test shall be performed upon Department request.

[Construction Permit No. AC24-56210, PSD-FL-082]

Z.15. **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.]

Excess Emissions

Z.16. The Permittee shall meet Conditions II.1. and II.6.

Common Conditions - On-Spec Used Oil/Lead

Z.17. This emissions unit is also subject to the On-Spec Used Oil/Lead conditions in Subsection EE**.**

Common Conditions - F.A.C. Test Requirements

Z.18. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
069	"D" Phosphoric Acid Plant

"D" Phosphoric Acid Plant emits fluoride, and the emissions are controlled by a wet scrubber. CAM does not apply for fluorides for this emissions unit.

{Permitting note: This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards. 40 CFR 63, Subpart A - General Provisions; NSPS - 40 CFR 60, Subpart T, Standards of Performance (NSPS) for the Phosphate Fertilizer Industry: Wet-Process Phosphoric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)26., F.A.C.; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

AA.1. Permitted Capacity. The operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 110 tons 100% P_2O_5 input. The operation rate shall not exceed 800,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

AA.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C. and PSD-FL-297]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

AA.3. **Total Fluorides.** Total Fluoride emissions from this emissions unit shall not exceed 0.012 lb/ton of equivalent P_2O_5 feed, 1.32 lb/hr and 4.8 TPY.

[Rule 62-204.800(7)(b)25., F.A.C.; 40 CFR 60.202; 40 CFR 63.602(a); and PSD-FL-297]
{Permitting Note- the limits established in PSD-FL-297 are more stringent than the MACT standard.}

AA.4. Visible Emissions. Visible Emissions shall not be equal to or greater than 20% opacity.

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

Operating Requirements

AA.5. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition G.G.4.(1) or (2).

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

Monitoring Requirements

AA.6. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(a)]

AA.7. **P_2O_5 Feed.** The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(b)]

AA.8. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.203(c)]

AA.9. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

Test Methods and Procedures

{Permitting note: 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.}

AA.10. <u>Total Fluorides</u>. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.202 as follows:

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

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

where:

E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

P=Mp Rp

AA.10. continued:

where:

Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.203(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.204(a) and (b)]

AA.11. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7.

AA.12. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.

[Rule 62-296.320(4)(b), F.A.C.; Rule 62-297.310(7)(a)4.a., F.A.C.; Rule 62-297.401, F.A.C.]

Notification, Recordkeeping, Reporting Requirements

AA.13. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

AA.14. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and AA,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

AA.15. continued:

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and AA,

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

Exemption from New Source Performance Standards.

AA.15. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions AA.6., GG.1 through GG.9 have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T is no longer valid.}
[40 CFR 63.610]

Common Conditions - F.A.C. Test Requirements

AA.16. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

AA.17. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

Subsection BB this section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
070	"C" & "D" Superphosphoric Acid (SPA) Plants (Vacuum Evaporation Process)

"C" & "D" Superphosphoric Acid (SPA) Plants and east & west phosphoric acid storage tanks emit fluoride, and are controlled by a scrubber. Since the Synspar Plant has no air emissions, the limerock (LR) bin associated with this emission unit is included here for recordkeeping purposes. The particulate matter emissions from this bin are controlled by a bag collector. CAM does not apply for fluoride for this emissions unit.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart U, Standards of Performance for Phosphate Fertilizer Industry: Superphosphoric Acid 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 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants (NESHAP) From Phosphoric Acid Manufacturing Plants. **The Part 40 CFR 63 Subparts A and AA 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 specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

BB.1. Permitted Capacity. The combined operation rate shall not exceed the Maximum Daily 1-Hour Average Rate = 110 tons of 100% P_2O_5 input. The operation rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit No. 0470002-034-AC, and PSD-FL-297]

BB.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

BB.3. Total Fluorides. Total Fluoride emissions at the sample port shall not exceed 0.0087 lb/ton of equivalent P_2O_5 feed; 0.96 lbs/hr and 3.8 TPY.

[Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.212; 40 CFR 63.602(b)(1), and PSD-FL-297]

Emission Point LR:

BB.4. Visible Emissions. Visible Emissions shall not exceed 5% opacity.

[Rule 62-297.620(4), F.A.C.]

Operating Requirements

BB.5. Scrubber Parameter Daily Averages. The permittee shall maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of Condition II.4.(1) or (2).

[Rule 62-204.800, F.A.C.; 40 CFR 63.604]

Monitoring Requirements

BB.6. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(a)]

BB.7. P_2O_5 Feed. The Permittee shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(b)]

BB.8. Scrubber Pressure Drop. The Permittee shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 60.213(c)]

BB.9. The Permittee shall meet the 40 CFR 63 Subpart AA requirements stated in Common Conditions GG.1 – GG.4.

Test Methods and Procedures

{Permitting note: 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.}

BB.10. Total Fluorides. The Permittee shall use the following procedures:

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b).

(b) The owner or operator shall determine compliance with the total fluorides standard in § 60.212 as follows:

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

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

where:
E=emission rate of total fluorides, g/Mg (lb/ton) of equivalent P_2O_5 feed.
Csi=concentration of total fluorides from emission point "i," mg/dscm (gr/dscf).
Qsdi=volumetric flow rate of effluent gas from emission point "i," dscm/hr (dscf/hr).
N=number of emission points associated with the affected facility.
P=equivalent P_2O_5 feed rate, Mg/hr (ton/hr).
K=conversion factor, 1000 mg/g (7,000 gr/lb).

BB.10. continued:

(2) Method 13A or 13B shall be used to determine the total fluorides concentration (Csi) and volumetric flow rate (Qsdi) of the effluent gas from each of the emission points. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The equivalent P_2O_5 feed rate (P) shall be computed for each run using the following equation:

$$P=Mp\ Rp$$

where:
Mp=total mass flow rate of phosphorus-bearing feed, Mg/hr (ton/hr).
Rp= P_2O_5 content, decimal fraction.

(i) The accountability system of § 60.213(a) shall be used to determine the mass flow rate (Mp) of the phosphorus-bearing feed.

(ii) The Association of Official Analytical Chemists (AOAC) Method 9 (incorporated by reference -- see § 60.17) shall be used to determine the P_2O_5 content (Rp) of the feed.

[Rule 62-204.800, F.A.C.;40 CFR 60.214]

BB.11. <u>Total Fluorides</u>. The Permittee shall meet the 40 CFR 63 Subpart AA performance testing requirements stated in Common Conditions GG.5 – GG.7 with the exception that testing shall be done every five years.
[Permit 0470002-033-AV, Rule 62-204.800(7)(b), F.A.C.; 40 CFR 60.214, Subpart U; Rule 62-297.401; F.A.C.]

From vent (LR):

BB.12. <u>Visible Emissions</u>. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually once each federal fiscal year.
[Rule 62-297.401, F.A.C. and Rule 62-297.310(7)(a)4.a., F.A.C.]

Notification, Recordkeeping, Reporting Requirements

BB.13. The Permittee shall meet the 40 CFR 63 Subpart AA notification, recordkeeping, and reporting requirements stated in Common Conditions GG.10. – GG.12.

BB.14. This emissions unit is subject to specific requirements of 40 CFR 63 Subpart AA, Appendix A to Subpart AA – Applicability to General Provisions to Subpart AA, and alternative MACT monitoring plan (Administrative Order No. 04-I-AP, dated October 4, 2004). The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA. To establish operating parameters for this emissions unit, the owner or operator must comply/and demonstrate with the following:

BB.13. continued:

1) Must comply with all conditions of the Order No. 04-I-AP,

2) Must comply with all applicable requirements of Subparts A and AA,

3) Specifically notify the department that the testing will be for establishing allowable ranges for this emissions unit according to Subparts A and AA,

4) All tests must be precisely conducted according to the MACT standards and all applicable test methods,

5) All tests must clearly demonstrate compliance with all MACT standards and applicable test methods and requirements,

6) All tests shall be submitted to the Department in accordance with Subparts A and AA,

7) The test results will become the new allowable ranges after the Department has had 30 days to review the test results. Failure to meet any requirements of this condition, Subpart A or AA, or the alternate plan will negate use of any new ranges derived from the test.

[40 CFR 63-Subpart A; 40 CFR 63-Subpart AA; and Administrative Order No. 04-I-AP, Alternate MACT Monitoring Plan]

Exemption from New Source Performance Standards.

BB.15. This emissions unit is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U. To be exempt, a source must have a current operating permit pursuant to Title V of the Clean Air Act and the source must be in compliance with all requirements of 40 CFR 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of Conditions BB.4., GG.1 through GG.9 have been met.

{Permitting Note: Department determined that the requirements for exemption have been met by the facility as of 8/16/06. In accordance with this regulation, if the source is not in compliance with all requirements of 40 CFR 63, Subpart AA, the exemption from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart U is no longer valid.}
[40 CFR 63.610]

Common Conditions - F.A.C. Test Requirements

BB.16. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Common Conditions – General Provisions of 40 CFR 63

BB.17. This emissions unit is also subject to the applicable requirements of 40 CFR 63 Subpart A.

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

E.U. ID No.	Brief Description
071	Acid Clarification Plant

Acid Clarification Plant utilizes a series of 5 rotary drum filters and a belt filter to filter 48% P_2O_5 phosphoric acid prior to evaporation to superphosphoric acid. Fluoride emissions are controlled by a packed, counter-current, wet scrubber. CAM does not apply for fluoride for this emissions unit.

{Permitting note: This emissions unit is regulated under Best Available Control Technology (BACT) Determination, dated February 28, 1978}

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

Essential Potential to Emit (PTE) Parameters

CC.1. Permitted Capacity. The rate shall not exceed Maximum Daily 1-Hour Average Rate = 110 tons 100% P_2O_5 input. The operating rate shall not exceed 876,000 tons during any 12 consecutive months of 100% P_2O_5 input.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC, and PSD-FL-297]

CC.2. Hours of Operation. The hours of operation for this emissions unit shall not exceed 8760 hours/year.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., and PSD-FL-297]

Emission Limitations and Standards

{Permitting note: 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.}

CC.3. Fluoride emissions shall not exceed (0.03 lb FL/ton P_2O_5 input) [1]; 3.3 lbs/hr and 13.1 TPY.

[Rule 62-210.200(42), F.A.C.; (BACT from AC24-2722 issued 02-28-78), and [1]PSD-FL-297]

Test Methods and Procedures

{Permitting note: 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.}

CC.4. Fluoride emissions stack test method shall be EPA Method 13A or 13B incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed annually with a frequency base date of 06/17.

[Rule 62-297.401, F.A.C.]

Common Conditions - F.A.C. Test Requirements

CC.5. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

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

E.U. ID No.	Brief Description
072	Molten Sulfur System for "E" & "F" Sulfuric Acid Plants

The Molten Sulfur System for "E" & "F" Sulfuric Acid Plants consists of a rail & truck unloading system with the following emission points: 1) RP - receiving pit, 2) FP - feed pit, 3) S1 - storage tanks vents (1-7), and 4) S2 - storage tanks vents (1-7). CAM does not apply.

{Permitting note(s): This emissions unit is regulated under Rule 62-296.411, F.A.C., Sulfur Storage and Handling Facilities.}

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

Essential Potential to Emit (PTE) Parameters

DD.1. Permitted **Capacity**. The rate shall not exceed the Maximum 12-MRA Hourly Rate = 68.75 tons of throughput or Maximum Daily 1-Hour Average Rate = 76 tons throughput.

12-MRA (MRA - Monthly Rolling Average) Hourly Rate Maximum shall not be exceeded by the 12-MRA hourly rate calculated by averaging each monthly hourly average with the previous 11 monthly hourly averages.

Throughput rate corresponds to the sulfur feed rate to the sulfuric acid plants.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; permit 0470002-034-AC and 0470005-009-AO]

DD.2. Hours **of Operation.** The hours of operation for this emissions unit shall not exceed 8760 hours/year.

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

Emission Limitations and Standards

{Permitting note: 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.}

{Permitting Note: Unless otherwise specified, the averaging times for these conditions are based on the specified averaging time of the applicable test method.}

DD.3. Molten sulfur transfer. 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 movable unloading areas and stationary pipes shall seat effectively around the entire circumference to minimize spillage.

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

DD.4. Pipe disconnection point. All areas surrounding points where molten sulfur pipes are routinely disconnected and areas where molten sulfur is transferred to trucks or tailraces 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 disconnection, reconnection or operation of the piping system.

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

DD.5. Molten sulfur spills. 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.]

DD.6. Vent surfaces. All vent surfaces shall be cleaned monthly to remove captured particles.

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

DD.7. Visible Emissions shall not exceed 20% opacity (six minute average) from each vent below:

RP - receiving pit
FP - feed pit
S1 - storage tanks vents (1-7)
S2 - storage tanks vents (1-7)

[Rule 62-296.411(1)(g), F.A.C. and Operation Permit No. 0470005-009-AO]

DD.8. **Operational procedures.** Approved operational procedures, by the Department, shall be established to minimize spills from any moveable loading arm or pipe upon disconnection, reconnection or operation.

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

Test Methods and Procedures

{Permitting note: 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.}

DD.9. Visible Emissions. Visible Emissions test method shall be EPA Method 9 incorporated and adopted by reference in Chapter 62-297, F.A.C. and be performed every 5 years prior to operation permit renewal for each vent below:

RP - receiving pit
FP - feed pit
S1 - storage tanks vents (1-7)
S2 - storage tanks vents (1-7)

[Rule 62-297.401, F.A.C.]

Recordkeeping and Reporting Requirements

DD.10. All owners and operators of molten sulfur storage and handling facilities shall maintain records of spills outside of containment areas and of collection and disposal of spilled sulfur. Such records shall be retained for a minimum of two years and shall be available for inspection by the Department upon request.

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

Common Conditions - F.A.C. Test Requirements

DD.11. This emissions unit is also subject to applicable F.A.C. Test Requirements in Subsection FF.

Subsection EE. Common Conditions - On-Spec Used Oil/Lead

E.U. ID No.	Sub-section	Brief Description
039	Q	'C' Auxiliary Boiler
040	R	'D' Auxiliary Boiler
068	BB	'E' Auxiliary Boiler
064	X	SCM Rock Dryer
004	D	X-Train
008	E	Y-Train
032	L	Z-Train

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

EE.1. The lead emissions cap for the facility is 9.4 TPY. The on-specification used oil fired in the 'C', 'D' & 'E' Auxiliary Boilers should not exceed 23,000,000 gallons per year which at 100 ppm yields 9.0 TPY of lead emissions. The on-specification used oil fired in the other emissions unit(s) listed above shall not exceed 0.4 TPY of lead emissions.

[Requested by the Applicant]

EE.2. The on-spec used oil prior to blending shall comply with the limits listed below and shall be recorded:

ON-SPEC USED OIL SPECIFICATIONS	
Constituent/Property	**Allowable Level**
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1,000 ppm maximum
Flash Point	100°F minimum

[40 CFR 761]

EE.3. On-specification used oil may be fired as follows:

1. At any time provided the maximum concentration of PCBs shall be less than 2 ppm and whether generated on or off-site. The analysis and recordkeeping requirements apply to each amount prior to blending even if to be blended with 90% virgin oil.

2. Only during normal operation temperature and not during startup or shutdown if the maximum concentration of PCBs is ≥ 2 but < 50 ppm.
[40 CFR 761]

EE.4. A certified on-specification used oil analysis of each delivery prior to blending shall be retained (in lieu of testing) and reported as part of the AOR.

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

EE.5. A lead emissions report shall be submitted by each March 01 as part of the AOR in a table format showing all of data and results required to document that the LEAD CAP has not been exceeded for the previous calendar year.

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

Subsection FF. Common Conditions - F.A.C. Test Requirements

Sub-section	E.U. ID No.	Brief Description
A.	001	#2 Phosphate Rock Grinder
B.	003	"A" Defluorinated Phosphate (DFP) Plant
C.	004	X-Train (Dical process)
D.	008	"Y" Train (#1 DAP Plant)
E.	010	#1 MAP/DAP
F.	015	MAP/DAP Screen/Ship
G.	020	"B" Phosphoric Acid Plant
H.	021	"C" Sulfuric Acid Plant
I.	022	"D" Sulfuric Acid Plant
J.	032	Z-Train (#2 DAP)
K.	034	South Phosphoric Acid Filters
L.	035	North Phosphoric Acid Filters
M.	036	"A" and "B" Superphosphoric Acid Plants
N.	038	"B" Defluorinated Phosphate (DFP) Plant
O.	039	"C" Auxiliary Boiler
P.	040	"D" Auxiliary Boiler
Q.	042	Defluorinated Phosphate (DFP) Feed Prep
R.	044	"A" and "B" Defluorinated Phosphate (DFP) Coolers
S.	054	Molten Sulfur System
T.	061	Green Superphosphoric Acid Plant
U.	062	Defluorinated Phosphate (DFP) Silos
V.	064	SCM Rock Dryer
W.	065	SCM Silos
X.	066	"E" Sulfuric Acid Plant
Y.	067	"F" Sulfuric Acid Plant
Z.	068	"E" Auxiliary Boiler
AA.	069	"D" Phosphoric Acid Plant
BB.	070	"C" and "D" Superphosphoric Acid Plants
CC.	071	Acid Clarification Plant
DD.	072	Molten Sulfur System

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

{Permitting Note: The following conditions are placed here as a convenience and to avoid duplication. See specific conditions in Subsections A through FF for applicability.}

62-297.310 General Compliance Test Requirements.
The focal point of a compliance test is the stack or duct which vents process and/or combustion gases and air pollutants from an emissions unit into the ambient air.

(1) Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard.

(2) Operating Rate During Testing. Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operation at permitted capacity as defined below. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load 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.

(a) Combustion Turbines. (Reserved)

(b) All Other Sources. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit.

(3) Calculation of Emission Rate. 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.

(4) Applicable Test Procedures.

(a) Required Sampling Time.

1. 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.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a FINAL surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

TABLE 297.310-1
CALIBRATION SCHEDULE

ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3
Probe Nozzles	Before each test or when nicked, dented, or corroded Max. deviation between readings	Micrometer	+/-0.001" men of at least three readings .004"
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually	Spirometer or calibrated wet test or dry gas test meter	2%
	2. One Point: Semiannually	Comparison check	5%
	3. Check after each test series		

(5) 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.

(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.

(6) Required Stack Sampling Facilities. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

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

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

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.

5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d). Work Platforms.

1. minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e). Access to Work Platform.

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

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

(f). Electrical Power.

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

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

(g). Sampling Equipment Support.

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

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

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

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

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

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

(7) Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62- 210.300(4)(a)1. through 7., F.A.C.

(b) 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.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

(8) Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with 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.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. 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.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
l2. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals, who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test procedure for each run.

19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

62-297.320 Standards for Persons Engaged in Visible Emissions Observations.

(1) Training and Certification Required. All persons engaged in determining the opacity of visible emissions in Florida shall attend training and be certified by a training provider in accordance with the procedures and requirements set forth below.
(a) Certification shall consist of satisfactory attendance and completion of a classroom lecture and a field qualification. For certification purposes, the classroom lecture and field qualification are separate and independent requirements.
(b) Attendance at the classroom lecture is required no less frequently than every three years. Successful completion of the field qualification is required no less frequently than every six months.
(c) Proof of certification shall be made by including copies of the signed and dated certificates or cards issued by the training providers with documentation of visible emissions observations submitted to the department, or otherwise upon request of the department.

(2) Requirements for Training Providers. All persons providing training leading to the certification of persons engaged in determining the opacity of visible emissions in Florida shall meet the requirements of subsections 62-297.320(2)-(8), F.A.C.
(a) For certification purposes, the classroom lecture and field certification are separate and independent requirements. For each course scheduled, each training provider shall offer a classroom lecture and one or more days of field qualification.
(b) Copies of quality assurance documentation, attendance records and field data sheets shall be maintained for a period of no less than three years after the conclusion of each course and shall be made available to the department upon request.
(c) Each training provider shall arrange for suitable locations for the classroom lecture and field qualification sessions that facilitate learning and reduce the impact of the smoke on passersby.

(d) To assure that cigar, pipe or cigarette smoke does not interfere with the observations of the trainees, each training provider shall enforce a policy of no smoking within the field qualification area.

(3) Classroom Lecture.
(a) The classroom lecture shall include the following topics and exercises:
1. Sources and causes of visible emissions.
2. Common types of emission control equipment and their effects on visible emissions observations.
3. History of opacity measurement.
4. Principles and theory of opacity.
5. Plume types and characteristics.
6. Legal aspects of visible emissions observations and legal defensibility of Method 9.
7. Basic meteorological conditions that influence plume behavior.
8. Proper procedures for conducting field observations under a variety of conditions.
9. A demonstration of commonly used measurement devices including a compass, a wind speed measurement device, and an inclinometer.
10. A written exercise demonstrating the proper procedure for documentation of observations.
(b) Training providers shall issue a signed and dated certificate or card to all persons attending the classroom lecture.

(4) Field Qualification.
(a) The field qualification shall be conducted in accordance with the requirements set forth in 40 CFR Part 60, Subpart A, EPA Method 9, adopted and incorporated by reference at Rule 62-204.800, F.A.C.; EPA Quality Assurance Handbook for Air Pollution Measurement Systems: Volume III, Section 3.12, hereby adopted and incorporated by reference; and EPA Guidelines for Evaluation of Visible Emissions (EPA 340/1-75-007, April 1975), hereby adopted and incorporated by reference.
(b) Each training provider shall meet requirements for quality assurance at least as stringent as those outlined in EPA Method 9.
(c) Each training provider shall monitor the attendees so that conferring or copying results during field qualification does not occur.
(d) Each training provider shall not provide hints of any kind or demonstrate the smoke standards during the field qualification sessions, except during familiarization runs prior to each test.
(e) Training providers shall issue a signed and dated certificate or card to all persons who successfully complete the field qualification.

(5) Notification to Department of Training Course Offerings. Each training provider shall notify the Department of all visible emissions training courses such provider offers in Florida at least 30 days prior to the start of each course.

(6) Notification to Department of Persons Receiving Certification. Each training provider shall provide a list of the names of attendees receiving certification at its courses to the department no later than 30 days after the conclusion of each course.

(7) Audit by the Department. For auditing purposes, each training provider shall allow one or more persons from the Department or a local air pollution control agency to observe each visible emissions training course offered in Florida without advance notice to the training provider. The training provider shall not issue a certificate or card to the observers, and shall not charge a fee for their attendance.

(8) Invalidation of Certificates. After investigation by the department, should any training provider's course be found by the department to not meet the requirements of this section, the certificates or cards offered by such provider for such course shall not be considered valid for visible emissions observations in Florida.

Subsection GG. Common Conditions – Subparts AA Monitoring and Testing Requirements

Sub-section	E.U. ID No.	Brief Description	Page
G.	020	"B" Phosphoric Acid Plant	29
M.	036	"A" and "B" Superphosphoric Acid Plants	39
V.	064	SCM Rock Dryer	56
AA.	069	"D" Phosphoric Acid Plant	65
BB.	070	"C" and "D" Superphosphoric Acid Plants	67

Monitoring Requirements

GG.1. Phosphorus-bearing Feed Material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(a)]

GG.2. P_2O_5 Feed and Phosphate Rock Feed. (1) Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed.

(2) Each owner or operator of a new or existing phosphate rock calciner or phosphate rock dryer subject to the provisions of this subpart shall maintain a daily record of phosphate rock feed by determining the total mass rate in metric ton/hour or short tons per hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of Condition II.1.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(b)(1)and (2)]

GG.3. Scrubber Pressure Drop and Liquid Flow Rate. Each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

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

GG.3. continued:

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

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(c)(1) and (2)]

GG.4. <u>Operating Parameter Allowable Range Methodology</u>. Following the date on which the performance test required in § 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.606(c)(4), (d)(4), or (e)(2). The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but, in no instance shall the adjustment be reduced to less than ±10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.607(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

GG.4. continued**:**

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.606(c)(4), (d)(4), or (e)(2). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.606(c)(4), (d)(4), or (e)(2). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[Rule 62-204.800, F.A.C.; 40 CFR 63.605(d)]

Performance tests and compliance provisions.

GG.5. Performance Tests.

(1) On or before the applicable compliance date in § 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.

(2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR 63 Subpart A and in section 63.606.

[40 CFR 63.606(a)]

GG.6. In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f).

[40 CFR 63.606(b)]

GG.7. **Total Fluorides**. Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in § 63.602 or § 63.603 as follows:

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

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

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
$\mathbf{C_{si}}$ = concentration of total fluorides from emission point ``i,'' mg/dscm (mg/dscf).
$\mathbf{Q_{sdi}}$ = volumetric flow rate of effluent gas from emission point ``i,'' dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

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

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

$$P = M_p R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

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

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

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

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

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

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

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

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

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

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

[40 CFR 63.606(c)]

GG.8. **Particulate Matter**. Each owner or operator of a new or existing phosphate rock dryer shall demonstrate compliance with the particulate matter standards in § 63.602 or § 63.603 as follows:

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

$$E = (C_s Q_{sd})/(PK)$$

where:
E = emission rate of particulate matter, kg/Mg (lb/ton) of phosphate rock feed.
C_s = concentration of particulate matter, g/dscm (g/dscf).
Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).
P = phosphate rock feed rate, Mg/hr (ton/hr).
K = conversion factor, 1000 g/kg (453.6 g/lb).

(2) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The system described in § 63.605(a) shall be used to determine the phosphate rock feed rate (P) for each run.

(4) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

[40 CFR 63.606(d)]

GG.9. Each owner or operator of a new or existing phosphate rock calciner shall demonstrate compliance with the particulate matter standards in §§ 63.602 and 63.603 as follows:

(1) Method 5 (40 CFR part 60, appendix A) shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 60 minutes and 1.70 dscm.

GG.9. continued:

(2) To comply with § 63.605(d)(1) or (2), the owner or operator shall use the monitoring systems in § 63.605(c) to determine the average pressure loss of the gas stream across each scrubber in the process scrubbing system and to determine the average flow rate of the scrubber liquid to each scrubber in the process scrubbing system during each of the particulate matter runs. The arithmetic average of the one-hour averages determined during the three test runs shall be used as the baseline average values for the purposes of § 63.605(d)(1) or (2).

[40 CFR 63.606(e)]

Notification, recordkeeping, and reporting requirements.

GG.10. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9.

[40 CFR 63.607(a)]

GG.11. Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10.

[40 CFR 63.607(b)]

GG.12. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.

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

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

[40 CFR 63.607(c)]

Subsection HH. Common Conditions – Subparts BB Monitoring and Testing Requirements

Sub-section	E.U. ID No.	Brief Description	Page
D.	008	"Y" Train (#1 DAP Plant)	16
J.	032	Z-Train (#2 DAP)	35

Monitoring Requirements

HH.1. Phosphorus-bearing feed material. The Permittee shall install, calibrate, maintain, and operate a monitoring system, which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of ±5 percent over its operating range.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(a)]

HH.2. P_2O_5 Feed. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of this subpart shall maintain a daily record of equivalent P_2O_5 feed.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(b)]

HH.3. Scrubber Pressure Drop and Liquid Flow Rate. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate the following monitoring systems:

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

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

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(b)]

HH.4. <u>Operating Parameter Allowable Range Methodology</u>. Following the date on which the performance test required in § 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in this subpart must establish allowable ranges for operating parameters using the methodology of either paragraph (1) or (2) of this Condition:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.626(c)(4) or (d)(4). The Administrator retains the right to reduce the ±20 percent adjustment to the baseline average values of operating ranges in those instances where performance test results indicate that a source's level of emissions is near the value of an applicable emissions standard, but in no instance shall the adjustment be reduced to less than ±10 percent. The owner or operator must notify the Administrator of the baseline average value and must notify the Administrator each time that the baseline value is changed as a result of the most recent performance test. When a source using the methodology of this paragraph is retested, the owner or operator shall determine whether new allowable ranges of baseline average values will be based upon the new performance test or (if the new performance test results are within the previously established range) whether there will be no change in the operating parameters derived from previous tests. When a source using the methodology of this paragraph is retested and the performance test results are submitted to the Administrator pursuant to §§63.627(c)(1), 63.7(g)(1), and/or 63.10(d)(2), the owner or operator will indicate whether the operating range will be based on the new performance test or the previously established range. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

(2) The owner or operator of any new or existing affected source shall establish, and provide to the Administrator for approval, allowable ranges for the daily averages of the pressure drop across and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system for the purpose of assuring compliance with this subpart. Allowable ranges may be based upon baseline average values recorded during previous performance tests using the test methods required in §63.626(c)(4) or (d)(4). As an alternative, the owner or operator can establish the allowable ranges using the results of performance tests conducted specifically for the purposes of this paragraph using the test methods required in this subpart and established in the manner required in §63.626(c)(4) or (d)(4). The source shall certify that the control devices and processes have not been modified subsequent to the testing upon which the data used to establish the allowable ranges were obtained. The allowable ranges developed pursuant to the provisions of this paragraph must be submitted to the Administrator for approval. The owner or operator must request and obtain approval of the Administrator for changes to the allowable ranges. When a source using the methodology of this paragraph is retested, the owner or operator shall determine new allowable ranges of baseline average values unless the retest indicates no change in the operating parameters outside the previously established ranges. If the Administrator has not denied approval of the new operating ranges within 30 days of submission of the performance test results, the new ranges shall be deemed approved and the new baseline value shall then be effective on the 31st day following submission.

[Rule 62-204.800, F.A.C.; 40 CFR 63.625(f)]

Performance tests and compliance provisions.

HH.5. Performance Tests.

(1) On or before the applicable compliance date in § 63.630 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

(2) As required by § 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of this subpart shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new diammonium and/or monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building. The owner or operator shall conduct the performance test according to the procedures in subpart A of this part and in this section.

[40 CFR 63.626(a)]

HH.6. In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR Part 60, Appendix A, or other methods and procedures as specified in this section, except as provided in § 63.7(f).

[40 CFR 63.626(b)]

HH.7. Total Fluorides. Each owner or operator of a new or existing diammonium and/or monoammonium phosphate process line or granular triple superphosphate process line shall determine compliance with the applicable total fluorides standards in § 63.622 or § 63.623 as follows:

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

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

where:

E = emission rate of total fluorides, g/metric ton (lb/ton) of equivalent P_2O_5 feed.
C_{si} = concentration of total fluorides from emission point "i," mg/dscm (mg/dscf).
Q_{sdi} = volumetric flow rate of effluent gas from emission point ``i,'' dscm/hr (dscf/hr).
N = number of emission points associated with the affected facility.
P = equivalent P_2O_5 feed rate, metric ton/hr (ton/hr).
K = conversion factor, 1000 mg/g (453,600 mg/lb).

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

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

$$P = M_p\, R_p$$

where:

M_p = total mass flow rate of phosphorus-bearing feed, metric ton/hr (ton/hr).
R_p = P_2O_5 content, decimal fraction.

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

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

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

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

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

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

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

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

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

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

[40 CFR 63.626(c)]

Notification, recordkeeping, and reporting requirements.

HH.8. Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in § 63.9.

[40 CFR 63.627(a)]

HH.9. Each owner or operator subject to the requirements of this subpart shall comply with the recordkeeping requirements in § 63.10.

[40 CFR 63.627(b)]

HH.10. The owner or operator of an affected source shall comply with the reporting requirements specified in § 63.10 as follows:

(1) Performance test report. As required by § 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in § 63.9.

(2) Excess emissions report. As required by § 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in § 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved as described in § 63.10.

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

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

[40 CFR 63.627(c)]

Subsection II. Common Conditions – F.A.C. Excess Emissions Rules

II.1. Excess Emissions– Startup, Shutdown, Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24 hour period unless authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

II.2. Excess Emissions – Existing Fossil Fuel Steam Generators. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

II.3. Excess Emissions – Existing Fossil Fuel Steam Generators – Soot Blowing and Load Change. Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this subparagraph, for boiler cleaning and load changes, at units which have installed and are operating, or have committed to install or operate, continuous opacity monitors. Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this subparagraph.

[Rule 62-210.700(3), F.A.C.]

II.4. Excess Emissions. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment of process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

II.5. Excess Emissions. Considering operational variations in types of industrial equipment operations affected by this rule, the Department may adjust maximum and minimum factors to provide reasonable and practical regulatory controls consistent with the public interest.

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

II.6. Excess Emissions– Malfunction. In case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]