Mosaic Fertilizer, LLC
Riverview Facility

Facility ID No. 0570008
Hillsborough County

Title V Air Operation Permit Revision

Permit No. 0570008-081-AV
Revision to Title V Air Operation Permit No. 0570008-079-AV

Permitting Authority:

State of Florida
Department of Environmental Protection
Air and Solid Waste Permitting, Southwest District

13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Telephone: (813) 470-5700
Fax: (813) 470-5996
E-mail: SWD_Air_Permitting@dep.state.fl.us

Compliance Authority:

Environmental Protection Commission
Of Hillsborough County

3629 Queen Palm Drive
Tampa, FL 33619

Telephone: (813) 627-2600
Fax: (813) 627-2660

Revision Formatting Note: In order to highlight the changes being made to permit No. 0570008-079-AV, revisions are presented in this DRAFT/PROPOSED permit in shaded/~~strikethrough~~ format with shaded areas indicating the additions and ~~strikethrough~~ indicating deletions from permit 0570008-079-AV. This formatting will be removed in the final permit.

Title V Air Operation Permit Revision

Permit No. 0570008-081~~79~~-AV

Table of Contents

Section **Page Number**

I. Facility Information.
- A. Facility Description. 2
- B. Summary of Emissions Units. 2-3
- C. Applicable Regulations. 4

II. Facility-wide Conditions. 5-7

III. Emissions Units and Conditions.
- A. EU No. 004 No. 7 Sulfuric Acid Plant
  EU No. 005 No. 8 Sulfuric Acid Plant
  EU No. 006 No. 9 Sulfuric Acid Plant 8-15
- B. EU No. 055 No. 5 AP Plant
  EU No. 007 No. 6 AP Plant 16-21
- C. EU No. 112 Auxiliary Steam Boiler 22-25
- D. EU No. 051 Conveyor No. 9 Transfer Points and Railcar Unloading
  EU No. 052 Conveyor No. 9 to Shipping Belt Conveyor
  EU No. 053 Vessel Loading Operation
  EU No. 058 Conveyor No. 6 to Conveyor No. 7
  EU No. 059 Conveyor No. 7 to Conveyor No. 8
  EU No. 060 Screening Tower and Conveyor No. 8 to Conveyor No. 9
  EU No. 061 East Vessel Loading Facility - Shiphold/Chokefeed 26-31
- E. ~~EU No. 055 No. 5 Granulation Plant~~ (Reserved) ..... ~~32-35~~
- F. EU No. 063 Molten Sulfur Storage – Tanks # 1, 2 and 3
  EU No. 066 Molten Sulfur Storage – Pit # 7
  EU No. 067 Molten Sulfur Storage – Pit # 8
  EU No. 068 Molten Sulfur Storage – Pit # 9
  EU No. 074 Molten Sulfur Storage – Truck Loading Station 36-41
- G. EU No. 073 Phosphoric Acid Production Facility 42-44
- H. EU No. 078 Animal Feed Ingredient (AFI) Plant No. 1
  EU No. 079 Diatomaceous Earth (DE) Silo
  EU No. 080 Limestone Silo
  EU No. 081 Animal Feed Ingredient (AFI) Loadout System
  EU No. 103 Animal Feed Ingredient (AFI) Plant No. 2 45-49
- I. EU No. 109 Clarifier and Storage Tanks 50-51
- J. EU No. 104 Phosphogypsum Stack North (No. 1)
  EU No. 108 Phosphogypsum Stack South (No. 2) 52
- K. EU No. 075 AP Storage Building Nos. 2, 4, 5, & 6
  EU No. 076 AP Loadout between Buildings 2 & 4
  EU No. 077 AP Loadout adjacent to Building 6 53-55
- L. EU No. 111 Existing Emergency CI RICE 56-60
- M. EU Nos. 007, 055 073 Common Conditions 61-65
- N. EU No. 113 ~~New~~ Non-Emergency CI ICE 66-68

IV. Appendices. 69
Appendix A, Glossary.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NSPS – 40 CFR 60 Subpart A – General Provisions.
Appendix NSPS – 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
Appendix NSPS – 40 CFR 60 Subpart H – Standards of Performance for Sulfuric Acid Plants (SAPs)
Appendix NSPS – 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines
Appendix NSPS – 40 CFR 60, Subpart IIII – Summary of Requirements.
Appendix NESHAP – 40 CFR 61 Subpart A – General Provisions.
Appendix NESHAP – 40 CFR 61 Subpart R – National Emission Standards for Radon Emissions from Phosphogypsum Stacks
Appendix NESHAP – 40 CFR 63 Subpart A – General Provisions
Appendix NESHAP – 40 CFR 63 Subpart AA – NESHAP for Phosphoric Acid Manufacturing Plants
Appendix NESHAP – 40 CFR 63 Subpart BB – NESHAP for Phosphate Fertilizer Production Plants
Appendix NESHAP – 40 CFR 63, Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – RICE Summary of Requirements
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – RICE Inventory and Facility Applicable Requirements
Appendix U, List of Unregulated Emissions Units and/or Activities.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.

Referenced Attachments. 70
Attachment A: Memorandum of Understanding Regarding Best Operational Start-up Practices for SAPs
Attachment B: Alternate MACT Monitoring Plan, Administrative Order 03-C-AP (Signed on 01/05/2004)
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.
Table CAM – CAM Applicability
Statement of Basis

~~*FINAL*~~ *DRAFT/PROPOSED PERMIT*

PERMITTEE:
Mosaic Fertilizer, LLC
13830 Circa Crossing Drive
Lithia, Florida 33547

Permit No. 0570008-0~~79~~81-AV
Riverview Facility
Facility ID No. 0570008
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V air operation permit No. 0570008-0~~78~~79-AV to incorporate terms and conditions of ~~an~~ air construction permit No. 0570008-0~~75~~74-AC and concurrently processed air construction permit No. 0570008-082 for the above referenced facility and to make some additional minor revisions to the Title V Permit. Air Construction Permit No. 0570008-0~~75~~74-AC authorized ~~the replacement of EU No. 043, Auxiliary boiler with a new boiler (EU No. 112)~~ modification of the No. 5 Ammoniated Phosphate Plant (EU No. 055). Air construction permit No. 0570008-082 changed the basis of emission calculations for the ammoniated phosphate plants No. 5 and 6 from raw material input based to production based. Revisions to the permit No. 0570008-0~~78~~79-AV are listed as below.

~~(1) Section III, Subsection C has been replaced in its entirety with specific conditions from Air Construction Permit No. 0570008-075-AC.~~

~~(2) .All other references to EU No. 043 have been replaced with references to EU No. 112.~~

~~(3) Appendix NSPS – 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units has been added.~~

~~(4) Permit has been updated to current template.~~

(1) Section III. Subsection B was modified to include descriptions and specific conditions for EU 055, No. 5 AP Plant, and to make testing and process rate calculations more consistent with other similar units and reduce redundant requirements. The description of the emissions control for this EU was updated to reflect the new configuration.

(2) Section III. Subsection E was removed.

(3) The Table of Contents was modified to reflect the changed listed above.

The existing Riverview Facility is located in Hillsborough County at 8813 US Highway 41 South, Riverview, Florida. UTM Coordinates are: Zone 17, 363.23 East and 3082.56 North. Latitude is: 27°51’39” North; and, Longitude is: 82°23’21” West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Initial Effective Date: 10/31/2011
Revised Effective Date: ~~06/09/2014~~ pending
Renewal Application Due Date: 03/20/2016
Expiration Date: 10/31/2016

(Draft/Proposed)

_____

Kelley M. Boatwright
Permitting & Waste Cleanup Program Administrator
Southwest District

KMB/ras/admin

Subsection A. Facility Description.

This facility consists of several industrial processes that convert insoluble rock containing phosphorus ore into a soluble form suitable for agricultural use. The processes consist of one phosphoric acid plant (two trains), two ammoniated phosphate (AP) plants, three sulfuric acid plants, one material handling system, one auxiliary boiler, two animal feed plants, a molten sulfur storage and handling system and emergency compression ignition (CI) reciprocating internal combustion engines (RICE).

The following activities are undertaken to produce fertilizer with water-soluble phosphorus and nitrogen values.

1. Phosphate rock delivered by railcar is unloaded, conveyed to storage, and ground by rotary ball mills.
2. Molten sulfur is burned under controlled stoichiometry to produce sulfuric acid.
3. Ground phosphate rock is acidulated with sulfuric acid, producing wet process phosphoric acid and byproduct calcium sulfate (gypsum) with release of fluoride compounds, including HF.
4. The phosphoric acid, which is approximately 30% by weight phosphorus expressed as P_2O_5, is sent to evaporators for concentration to 54%.
5. Ammoniated phosphate (AP) are produced by combining blended 54% and 30% phosphoric acid with ammonia in various mole ratios to produce mono-ammonium phosphate (MAP) or di-ammonium phosphate (DAP).
6. AP products are conveyed to dry storage buildings by trip conveyors, dropped to storage piles. These storage buildings store, handle and loadout AP product to conveyors and associated transfer equipment, such as bulk toters, feed and loadout elevators, mini bin system, and ribbon blender to load ships, barges, railcars, trucks and containers.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
004	No. 7 Sulfuric Acid Plant
005	No. 8 Sulfuric Acid Plant
006	No. 9 Sulfuric Acid Plant
007	No. 6 AP Plant
051	Conveyor No. 9 Transfer Points and Railcar Unloading
052	Conveyor No. 9 to Shipping Belt Conveyor
053	Vessel Loading Operation
055	No. 5 ~~Granulation~~ AP Plant
058	Conveyor No. 6 to Conveyor No. 7
059	Conveyor No. 7 to Conveyor No. 8
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9
061	East Vessel Loading Facility - Shiphold/Chokefeed
063	Molten Sulfur Storage and Handling System – Tank #1, 2 and 3
066	Molten Sulfur Storage and Handling System -- Pit #7
067	Molten Sulfur Storage and Handling System -- Pit #8
068	Molten Sulfur Storage and Handling System -- Pit #9
073	Phosphoric Acid Production Facility

074	Molten Sulfur Storage and Handling System -- Truck Loading Station
075	AP Storage Building Nos. 2, 4, 5 & 6
076	Loadout between Buildings 2 & 4
077	Loadout adjacent to Building 6
078	Animal Feed Ingredient (AFI) Plant No. 1
079	Diatomaceous Earth (DE) Silo
080	Limestone Silo
081	Animal Feed Plant (AFI) Loadout System
103	Animal Feed Ingredient (AFI) Plant No. 2
104	Phosphogypsum Stack North (No. 1)
108	Phosphogypsum Stack South (No 2.)
109	Clarifier and Storage Tanks
111	Existing Emergency Stationary RICE < or equal to 500 HP
112	Auxiliary Steam Boiler
113	Non-Emergency CI ICE
Unregulated Emissions Units and Activities	
105	Facility-Wide Fugitive Emissions: - SO_2, SO_3, SAM emissions from the 7, 8 & 9 Sulfuric Acid Plants - Fluoride emissions from the Phosphoric Acid Plant - Fluoride, NH_3, PM emissions from the Nos. 5 & 6 ~~Granulation~~ AP Plants - Hydrogen Fluoride emissions from the Phosphogypsum Stacks and Cooling Ponds *Note: For this emissions unit, Annual Operation Report (AOR) emissions estimates are required only for the Hydrogen Fluoride emissions from the Phosphogypsum Stacks and Cooling Ponds.*

Subsection C. Applicable Regulations.

Based on the Title V air operation permit revision application received ~~04/02/2014~~ October 20, 2014, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a PSD major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	**EU No(s).**
40 CFR 60, Subpart A, NSPS General Provisions	004, 005, 006, 113
40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	112
40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants	004, 005, 006
40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	113
40 CFR 61, Subpart A, NESHAP General Provisions	104, 108
40 CFR 61, Subpart R, National Emission Standards for Radon Emissions From Phosphogypsum Stacks	104, 108
40 CFR 63, Subpart A, General Provisions	007, 055, 073
40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants	073
40 CFR 63, Subpart BB - National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants.	007, 055
40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	111
40 CFR 63, Subpart DDDDD—National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	112
Rule 62-296.402, F.A.C.	004, 005, 006
Rule 62-296.403, F.A.C.	007, 055
Rule 62-296.406, F.A.C.	112
Rules 62-296.700 and 62-296.711, F.A.C.	051, 052, 053, 058, 059, 060, 061
62-212.300, 62-212.400, 62-296.320, 62-296.700, 62-296.711	078, 079, 080, 081, 103
Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.	All

The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices - The permittee shall comply with all documents identified in Section IV, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

FW2. **Not federally Enforceable -** Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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 or organic solvents 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.]

(Permitting Note - Nothing is deemed necessary and ordered at this time}

FW4. General Visible Emissions - No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement.
[Rule 62-296.320(4)(b)1, F.A.C.]

FW5. Unconfined Particulate Matter - No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. Confine sand blasting when practical.

b. All outside fertilizer conveyor belts are covered.

c. Use street cleaning equipment to remove dirt from paved areas.

d. Keep covers on process equipment.

e. Prompt cleanup of dry rock spills.

f. Post speed limit on plant roads.

g. Fertilizer products are stored inside buildings.

h. Product material transfer points are enclosed.

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

Annual Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements for additional details.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site: http://www.dep.state.fl.us/air/emission/tvfee.htm. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. ***A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.****}*

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit within 60 days after the end of each calendar year during which the Title V permit was effective.
[Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

FW8. Prevention of Accidental Releases (Section 112(r) of CAA).

a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)

b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.

c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.

e. Any Risk Management Plans, original submittals, revisions, or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: http://www.epa.gov/osweroe1/content/rmp/index.htm. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.

g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

***IMPORTANT NOTES TO PERMITTEE*:**

Permit Renewal - see Appendix TV, Condition No. TV18.

(Note - Renewal application is due 225 days prior to expiration date of this permit.)

Title V Semi-Annual Monitoring Reports - see Appendix RR, Condition No. RR4.

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-004	No. 7 Sulfuric Acid Plant
-005	No. 8 Sulfuric Acid plant
-006	No. 9 Sulfuric Acid Plant

Descriptions:

Sulfuric Acid Plants (SAPs) No. 7, No. 8 and No. 9 have a design capacity of 3,200 tons per day (TPD), 2,700 TPD, and 3,400 TPD of 100% sulfuric acid, respectively. Each SAP recovers a portion of the waste heat (steam) for process use and to generate electricity. Waste heat recovery reduces plume visibility. There are two electrical generators at each SAP, rated at 35 kilowatts (kW) and 36 kW for a total of 71 kW. These plants are sulfur burning, double conversion, double absorption plants of Leonard-Monsanto design. Sulfur is burned with dried atmosphere oxygen to produce sulfur dioxide (SO_2). The sulfur dioxide is catalytically oxidized to sulfur trioxide (SO_3) over a catalyst bed. The sulfur trioxide is then absorbed in sulfuric acid. The remaining sulfur dioxide, not previously oxidized, is passed over a final converter bed of catalyst and the sulfur trioxide produced is then absorbed in sulfuric acid. SAP Nos. 7, 8 and 9 began operating in 1961, 1965 and 1974, respectively.

Air pollution control systems and measures: The control of SO_2 emissions is primarily by the process itself. Currently, a double conversion, double absorption plant efficiently converts SO_2 to SO_3 then SO_3 reacts in a mixture of water and sulfuric acid to produce sulfuric acid. In a double absorption system, the conversion efficiency from SO_2 to SO_3 is at least 99.7%. All three plants use a vanadium catalyst in the converters, except that in the 4th pass of the SAP No. 9 a cesium promoted catalyst is used. The current catalyst bed volumes in the No. 7 SAP are 102,000 liters in the 1st pass, 112,000 liters in the 2nd pass, 155,000 liters in the 3rd pass, and 209,000 liters in the 4th pass; for a total of 578,000 liters. The current total catalyst volume in the No. 8 SAP is 472,000 liters. The current total catalyst volume in the No. 9 SAP is 508,000 liters. Sulfuric acid mist (SAM) emissions are controlled by the use of high efficiency acid mist eliminators (demister pads) or impaction-type glass fiber collection devices. Best operational practices are followed to minimize excess emissions during startup and shutdown.

Monitors: Each SAP is equipped with an existing SO_2 continuous emissions monitoring system (CEMS). The SO_2 CEMS have been required by the circa 1977 Standards of Performance for New Stationary Sources (NSPS). The CEMS installed for SAP No. 7 is an Ametek Model 4600B. SAP Nos. 8 and 9 each have an Ametek/Dupont Model 40/460 CEMS.

Stack Parameters: Emissions not absorbed by each double absorption system are vented through each individual SAP's 150 foot stack. The stack exhaust gas characteristics for SAP Nos. 7, 8 and 9 are: exhaust gas temperatures of 170, 150 & 152 ºF; exhaust gas flow rates 122,000, 105,000 & 149,000 acfm; and, stack diameters of 7.5, 8.0 & 9.0 feet.

The Converter, Superheater No. 3 and Cold Interpass Exchanger of SAP No. 8 were replaced. The No. 8 SAP converter is a Fleck Chemical Industries, Inc. converter. The converter contains Bed Nos. 1 through 4 in one unit. The new converter is designed to load up to 615,826 liters of catalyst. The catalyst that is used in the converter is VK-38 vanadium catalyst produced by Haldor Topsoe Inc. The No. 3 Superheater at the No. 8 SAP was manufactured by Technotherm Corporation. The No. 8 SAP cold interpass exchanger was manufactured by Aker Kvaerner Chemetics. The list of equipment stated above does not have model numbers since these are all custom pieces of equipment. A 153 MMBtu/hr natural gas burner was added to the sulfuric acid plant furnace. This natural gas burner is in addition to an existing 140 MMBtu/hr oil burner. The oil burner is fired with No. 2 fuel oil with a maximum sulfur content of 0.5%. Either the oil burner or the natural gas burner (removable auxiliary burner) provides the necessary heat during the cold startup of any of the Sulfuric Acid Plant (SAP) Nos.

7, 8 or 9. Typically each SAP experiences 3 cold startups per year and 13,000 gallons of No. 2 fuel oil is used per startup.

Carried out the following activities under Best Available Retrofit Technology (BART) avoidance Permit No. 0570008-061-AC.

Increased catalyst loading in SAPs 7, 8 and 9 as follows:

No. 7 SAP: Increased the catalyst loading ratio from approximately 181 liters per ton of H_2SO_4 per day (L/TPD) to approximately 210 L/TPD {increase the current catalyst loading from approximately 578,000 liters to approximately 673,000 liters.

No. 8 SAP: Increased the catalyst loading ratio from approximately 175 liters per ton of H_2SO_4 per day (L/TPD) to approximately 220 L/TPD {increase the current catalyst loading from approximately 472,000 liters to approximately 594,813 liters.

No. 9 SAP: Increased the catalyst loading ratio from approximately 149 liters per ton of H_2SO_4 per day (L/TPD) to approximately 169 L/TPD {increase the current catalyst loading from approximately 508,000 liters to approximately 573,400 liters.

Replaced the No. 7 SAP cold gas-to-gas heat exchanger. Installed a heat recovery system (HRS) to replace the interpass absorption (IPA) tower in No. 9 SAP.

{Permitting notes: The SAPs are currently regulated under NSPS 40 CFR 60, Subpart H, Standards of Performance for Sulfuric Acid Plants, adopted and incorporated by reference in Rule 62-204.800(7)(b)10., F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD), PSD-FL-209 (AC29-241660) - 1st BACT for SAP Nos. 8 & 9, PSD-FL-250 (0570008-025-AC) - 1st BACT for SAP No. 7, PSD-FL-315 (0570008-036-AC) - 2ndBACT for SAP Nos. 8 & 9; Rule 62-296.402, F.A.C., Sulfuric Acid Plants; and, Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards.}

Essential Potential to Emit (PTE) Parameters

A.1. Permitted Capacity. The maximum sulfuric acid production rate are as follow:

E.U. No.	Plant Name	Maximum Production Rate
004	No. 7 SAP	3,200 tpd of 100% H_2SO_4
005	No. 8 SAP	2,700 tpd of 100% H_2SO_4
006	No. 9 SAP	3,400 tpd of 100% H_2SO_4

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-296.405, F.A.C.; Construction Permits 0570008-025-AC / PSD-FL-250, 0570008-036-AC / PSD-FL- 315 and 0570008-061-AC]

A.2. Methods of Operation.

Fuels. The fuels that are allowed to be burned in these units are:

(1) Natural gas,

(2) No. 2 fuel oil with a maximum sulfur content of 0.5% by weight.

[Rule 62-213.410, F.A.C.; Construction Permit 0570008-057-AC]

A.3. Hours of Operation. The natural gas burner for Sulfuric Acid Plants (SAPs) 7, 8 & 9 cold start-up will operate no more than 200 hours per year. The SAPs 7, 8 & 9 may operate continuously (8,760 hours/year).

[Rule 62-210.200(PTE), F.A.C.; Construction Permits 0570008-025-AC, 0570008-036-AC & 0570008-057-AC]

A.4. Fuel Usage. The natural gas usage shall not exceed 30,000,000 standard cubic feet of natural gas per 12 consecutive month period based on a natural gas heat content of 1,020 Btu/standard cubic foot.
[Rules 62-213.440(1) and 62-210.200 (PTE), F.A.C.]
{Permitting Note: As established in Title V Permit 0570008-063-AV}

A.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{*Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}*

Unless otherwise specified, the averaging time for Specific Conditions **A.8.** and **A.9.** is based on the specified averaging time of the applicable test method.

A.6. Visible Emissions – Normal Condition. Visible emissions from each SAP shall not exceed 10% opacity (except during start-up, shutdown, or malfunction, pursuant to Rule 62-210.700, F.A.C.
[62-296.402 and 62-210.700, F.A.C.; Construction Permit 0570008-057-AC]

A.7. Visible Emissions – Exceptional Condition. Visible emissions from each SAP not to exceed 40% opacity are allowed for a thirty (30) minute during the plant start-up.
[Section 1-3.63(a) of the Rules of Environmental Protection Commission of Hillsborough County; Construction Permit 0570008-057-AC]

A.8. Sulfur Dioxide Emissions Limitations. Sulfur dioxide (SO_2) emissions from each sulfuric acid production unit shall not exceed any of following as certified by the CEMS data:

SAP No.	lb/hour
7	400
8	315
9	425

Emissions of SO_2 shall not exceed 400 pounds per hour for No. 7 SAP, 315 pounds per hour for No. 8 SAP, and 425 pounds per hour for No. 9 SAP based on a 24-hour (daily) block average as determined by CEMS data.

{The equivalent lb SO_2/ton 100% H_2SO_4 values for SAP Nos. 7, 8 and 9 at design capacity are: 3.0 lb SO_2/ton 100% H_2SO_4; 2.8 lb SO_2/ton 100% H_2SO_4; and, 3.0 lb SO_2/ton 100% H_2SO_4, respectively. The equivalent lb/ton values corresponding to the lb/hour limits are less than the current existing standards. The equivalent tons per year (TPY) values for SAP Nos. 7, 8 and 9 are: 1,752 TPY; 1,380 TPY; and, 1,862 TPY, respectively. This permit requires CEMS to be used to demonstrate compliance on a continuous basis on a 24-hour (daily) block average. A 24-hour (daily) block average was established based on the emission rate averaging period of 24-hour (daily) used in the air dispersion modeling.}

[Rule 62-296.340(5)(c) (escape BART), F.A.C.; and, BART avoidance Construction Permit No. 0570008-061-AC)]

A.9. Sulfuric Acid Mist Emissions Limitations. Sulfuric Acid Mist (SAM) emissions expressed as H_2SO_4, from each sulfuric acid production unit shall not exceed any of following as demonstrated by the stack test data:

SAP No.	lb/hour
7	6.7
8	5.6
9	7.1

Emissions of SAM shall not exceed 6.7 pounds per hour for No. 7 SAP, 5.6 pounds per hour for No. 8 SAP, and 7.1 pounds per hour for No. 9 SAP based on a 3-hour average as determined by stack test data.

{The equivalent lb SAM/ton 100% H_2SO_4 values for SAP Nos. 7, 8 and 9 at design capacity for each SAP is 0.05 lb SAM/ton 100% H_2SO_4. The equivalent lb/ton value corresponding to the lb/hour limits is less than the current existing standards. The equivalent tons per year (TPY) values for SAP Nos. 7, 8 and 9 are: 29.3 TPY; 24.5 TPY; and, 31.1 TPY, respectively. This permit requires stack test data to be used to demonstrate compliance. Compliance with the 3-hour average by stack test assures compliance with a numerical standard on a 24-hour (daily) average basis. The air dispersion modeling was performed using a 24-hour (daily) average.}

[Rule 62-296.340(5)(c) (escape BART), F.A.C.; and, BART avoidance Construction Permit No. 0570008-061-AC)]

A.10. Minimize Fugitive Emissions. This Permit acknowledges that leaks of sulfur dioxide and sulfur trioxide, or other fugitive process emissions that do not pass through a stack, may occur as part of routine operations. Best operational practices to minimize these emissions shall be adhered to and shall include regular inspections and the prompt repair or correction of any leaks or other fugitive emissions.
[Rule 62-4.070(3), F.A.C.]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

A.11. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.12. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

A.13. Maintenance of Pollution Control & Process Equipment. **Not federally enforceable.** Pursuant to Chapter 1-1.06, Rule of the ~~Environmental Protection Commission of~~ Hillsborough County Environmental Protection Commission, the permittee shall maintain the pollution control and process equipment in good repair in order to reduce reportable events and fugitive leaks which might result in elevated emissions.
[Chapter 1-1.06, Rules of the Environmental Protection Commission of Hillsborough County]

Continuous Emissions Monitoring Requirements

A.14. SO_2 Continuous Emissions Monitoring System (CEMS): For each of these SAPs, an SO_2 CEMS shall be used to demonstrate continuous compliance with the SO_2 emission standards and limitations specified in this section.

a. In accordance with the NSPS (40 CFR 60, Subpart H) requirements for sulfuric acid plants, the permittee shall continue to properly calibrate, maintain, and operate a CEMS to measure and record emissions of SO_2. In accordance with PSD-FL-250 & PSD-FL-315, the permittee shall continue to use SO_2 CEMS data to demonstrate compliance.

b. A CEMS shall be properly calibrated, maintained, and operated to comply with: 40 CFR 60 Subpart A, General Provisions; 40 CFR 60 Appendix B, Performance Specification 2; and, 40 CFR 60, Appendix F, Quality Assurance Procedures for Gas CEMS Used for Compliance Determination.

c. The emissions data collected with the certified CEMS shall be used to demonstrate continuous compliance with the standards and limitations specified in this section.

[Rules 62-296.340(5)(c) (escape BART), 62-4.070(1)&(3) (Reasonable Assurance), and 62-213.440(1) (Assurance of Compliance), F.A.C.; and, BART avoidance Construction Permit No. 0570008-061-AC]

A.15. Emission in units of Applicable Standard. The Permittee shall determine emissions in the units of the applicable standard (lb/ton) in accordance with 40 CFR 60.84(b) or (d).
[Rules 62-204.800(7)(b)10 and 62-297.500, F.A.C., and 40 CFR 60.84]

Test Methods and Procedures

{**Permitting Note: The attached Table 2, 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.16. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
6, 6C	Determination of Sulfur Dioxide Emissions from Stationary Source
8	Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

A.17. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

A.18. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards for:

a. visible emissions
b. sulfuric acid mist (SAM)

[Rule 62-297.310(7), F.A.C.; Construction Permit 0570008-060-AC]

Recordkeeping and Reporting Requirements

A.19. Daily Records of SAP Production. In order to document compliance with Specific Condition No. A.1, the permittee shall maintain a daily record of sulfuric acid plant production rate (in TPD as 100% H_2SO_4) for each plant. These records shall be recorded in a permanent form suitable for inspection by the Department or the Environmental Protection Commission of Hillsborough County upon request.
[Rule 62-213.440(1), F.A.C.]

A.20. Fuel Recordkeeping Device(s). The Permittee shall install, calibrate, and maintain gas flow meter for the burner in order to demonstrate compliance with Specific Condition No. A.4.
[Rule 62-4.070(3), F.A.C.; Construction Permit 0570008-057-AC]

A.21. Cold Startup on Natural Gas Firing. In order to document compliance with the Specific Condition No. A.3. and A.4., the permittee shall maintain, but not limited to, the following log for SAP Nos. 7, 8 and 9 during cold start-up operation on natural gas firing:

Daily

a. Facility Name, Facility ID No. (0570008), Emission Unit ID Nos. 004, 005 & 006 and Description;
b. Date;
c. Cold Start-Up Mode (Natural gas firing);
d. During start-up, Daily, record the hours of operation of the SAP 7, 8 and 9 in gas firing mode;
e. When start-up, Daily, record the quantity, in standard cubic feet, of the natural gas consumption from the gas flow meter that measured gas flow for the SAP Nos. 7, 8 and 9.

Daily records shall be completed within 5 business days.

Monthly

f. Total hours of operation in gas firing mode during SAP 7, 8 & 9 cold start-up in last consecutive 12-months;
g. Total natural gas consumption, in standard cubic feet, in last consecutive 12-months.

Monthly records shall be completed by the 15th day of the following month.
[Rule 62-4.070(3), F.A.C., Construction Permit 0570008-057-AC]

A.22. Sulfur Dioxide & Sulfuric Acid Mist Emissions. In order to document ongoing compliance with the emission limitations of Specific Condition A. 8. and A.9., the permittee shall maintain records on the Sulfuric Acid Plants. The records shall include, but not limited to, the following:

a. Facility Name, Facility ID No. (0570008), Emission Unit ID Nos. 004,005 & 006, and Description;
b. Date;

Daily

c. While operating, record the hours of operation;
d. While operating, record the H_2SO_4 production (in tons as 100% H_2SO_4);
e. While operating, record the H_2SO_4 production rate, in tons per hour (daily average);
f. 3-hour and 24-hour average of SO_2 emissions (lb/ton as 100% H_2SO_4) using the 3-hour and 24-hour average or 3-hour and 24-hour block average as appropriate;
g. daily SO_2 and sulfuric acid mist emissions (pounds/hour);

Daily records shall be completed within 5 business days of the day of operation.

Monthly (Rolling 12-month period)

h. Total H_2SO_4 production (tons), total emissions of SO_2 and sulfuric acid mist (tons).

Monthly record shall be completed by the 15th day of the following month.
[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-060-AC]

A.23. Sulfur Dioxide Monitoring Malfunction Record. For each plant, in accordance with 40 CFR 60.7(b), the permittee shall maintain records of any periods during which the sulfur dioxide monitor system is inoperative. Records on monitoring system performance evaluations, calibrations and maintenance shall be maintained in accordance with 40 CFR 60.7(d). All of the above records shall be made available to the Department and the Environmental Protection Commission of Hillsborough County upon request.
[Rule 62-204.800, F.A.C., and 40 CFR 60.7]

A.24. Excess Emission Reporting. For each plant, the permittee shall submit a written report of excess sulfur dioxide emissions semi-annually in accordance with 40 CFR 60.7 (b) and (c). Periods of excess emissions shall be all three-hour periods (or the arithmetic average of three consecutive one-hour periods) during which the integrated average sulfur dioxide emissions exceed the applicable standard under 40 CFR 60.82. The excess emission report shall also include a statement of all periods during the quarter when the sulfur dioxide monitoring system was inoperative. The semi-annual sulfur dioxide excess emission report shall be submitted to the Department's Southwest District Office and the Environmental Protection Commission of Hillsborough County within 30 days following the end of reporting period pursuant to 40 CFR 60.7(c) as adopted by Section 62-204.800(7), F.A.C. The report shall contain the information specified in 40 CFR 60.7(c)(1), (2), (3) and (4).
[Rule 62-204.800, F.A.C., and 40 CFR 60.7 and 60.84(e)]

A.25. Sulfur Dioxide BACT Revision Requirement. Before the permittee makes a change to the SO_2 control strategy as indicated in the construction permit 0570008-025-AC/PSD-FL-250, the permittee must submit to the Department for review and approval a permit modification request to revise the Best Available Control Technology Determination (BACT).
[Rules 62-4.070 and 62-212.400, F.A.C.; Construction Permit 0570008-025-AC/PSD-FL-250]

A.26. Abnormal Event Notification. **Not federally enforceable.** Pursuant to Chapter 1-1.05, Rules of the Environmental Protection Commission of Hillsborough County, the permittee shall promptly notify* the Commission's Air Programs Department of any abnormal reportable event** associated with the operation of this plant which results in elevated emissions. Notification shall include the following:

a. Facility name, Facility ID#
b. Source name, Emission Unit ID #
c. Cause (if known)
d. Time and duration of event
e. CEM reading, if applicable
f. Steps taken to reduce emissions if event is still occurring
g. Identification of person reporting the event

A reportable event shall not constitute a Permit violation strictly because it is a reportable event.
*For the purposes of this condition, prompt notification shall mean at any time prior to a cold start-up, at any time prior to or within thirty (30) minutes following a hot start-up or at any time prior to or within thirty (30) minutes following the occurrence of a reportable event.

**For the purposes of this condition, reportable events shall be deemed to occur upon the happening of the following events:

I. For all start-ups (hot or cold):
   a. The moment when the unit begins to burn sulfur.

II. For whenever the plant is burning sulfur other than during a start-up:
   a. Whenever the sulfur dioxide emissions exceed 1000 ppm for longer than a 5 minute period based on the Continuous Emission Monitoring System (CEMS).
   b. Whenever the sulfur dioxide emissions exceed 4 pounds/ton of acid produced for longer than (30) consecutive minutes based on the CEMS.
   c. Whenever the sulfur dioxide emissions exceed ten (10) pounds/ton of acid produces for longer than 10 consecutive minutes.

III. For any incident wherein the permittee receives a complaint or there is an indication or potential for a nuisance to exist.

[Chapter 1-1.05, Rules of the Environmental Protection Commission of Hillsborough County]

Source Commitments

A.27. Best Operational Start-up Practice for SAPs. The permittee shall follow the *Memorandum of Understanding Regarding Best Operational Start-Up Practices for Sulfuric Acid Plants*; see *Attachment A.*
[Signed and executed on October 25, 1989]

A.28. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

Other Requirements

A.29. Federal Rule Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart H – Sulfuric Acid Plants.
[Rule 62-213.440, F.A.C.]

Subsection B. Emissions Unit Nos. 007 & 055

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-007	No. 6 AP Plant
-055	No. 5 ~~Granulation~~ AP Plant

Ammoniated Phosphate (AP) is manufactured by reacting anhydrous ammonia and phosphoric acid in a sealed reaction tank and then by further adding ammonia to the ammoniated acid in a rotary reactor-granulator. The granulated un-sized AP exits the granulator and is dried in a rotary dryer. The dried material is then screened and the oversized and undersized material is recycled back to the granulator. The product is then cooled in a rotary drum cooler, screened, and sent to storage.

The No. 6 AP manufacturing plant has a maximum daily average capacity of 186 tons per hour ammoniated phosphate production. Emissions from the reactor and granulator are routed to the RG venturi cyclonic pre-scrubber which exhausts, with evacuated flows from the equipment vents, then to the RGV venturi cyclonic scrubber from which the gas streams go to the vaporizer and then exhaust to the atmosphere via the north stack. Emissions from the dryer are routed to the Dryer venturi cyclonic scrubber and then to the Dryer packed bed tailgas scrubber to exhaust to atmosphere via the north stack. Emissions from the cooler are routed to the Cooler venturi cyclonic scrubber and then to the Cooler packed bed tailgas scrubber to exhaust to atmosphere via the south stack. De-dusting coating oil application ribbon blenders between the polishing screens and the product belt conveyor downstream of the rotary cooler further control PM emissions. The scrubbing liquid for the RG venturi cyclonic pre-scrubber, RGV venturi cyclonic scrubber and the dryer venturi cyclonic scrubber is phosphoric acid solution and the scrubbing liquid for the two packed bed tailgas scrubbers is fresh water in a closed loop system. The dryer is fired with natural gas as primary fuel, with No. 2 fuel oil as back-up, at a design rate of 80 mmBtu/hr.

In the No. 5 AP manufacturing plant (formerly No. 5 Granulation Plant), emissions from the reactor and granulator are routed to a spray cyclonic pre-scrubber and from there to the RG venturi cyclonic scrubber and then to the RGE spray cyclonic tailgas scrubber which exhausts to the atmosphere via the single plant stack. Emissions from the cooler are routed via a cyclone to the venturi cyclonic scrubber and exhaust to the atmosphere via the stack. Emissions from the dryer go to the dryer venturi scrubber and from there to the dryer spray cyclonic scrubber and to the stack. Equipment emissions from the screens, conveyors and associated processes go to the Equipment venturi cyclonic scrubber and from there to the RGE spray cyclonic tailgas scrubber to exhaust via the stack. The scrubbing liquid for the pre-scrubber, RG scrubber, Equipment scrubber and the Dryer scrubber is phosphoric acid solution and scrubbing liquid for the two tailgas scrubbers and the cooler scrubber is fresh water. The fresh water system is a closed loop system with blow down utilized to optimize operations.

~~The AP (Ammoniated Phosphate) manufacturing plant has a maximum production capacity of 186 tons per hour ammoniated phosphate production.~~

~~Emissions from the reactors and granulator are controlled by the RGV venturi scrubber followed by the RGV tower tailgas scrubber and followed by ammonia vaporizer. Emissions from the dryer are controlled by the dryer venturi scrubber followed by dryer packed-tower tailgas scrubber. The dryer tailgas scrubber and vaporizer discharge through a common stack. Emissions from cooler and miscellaneous points are controlled by cooler venturi scrubber followed by cooler tailgas scrubber. The cooler tailgas scrubber discharges through a separate stack. De-dusting coating oil application ribbon blenders between the polishing screens and the product belt conveyors downstream of the rotary coolers further control PM emissions. The dryer is fired with natural gas as the primary fuel, with No. 2 fuel oil as back-up at a design rate of 80 MMBtu/hr.~~

{Permitting notes:

1) *This emission unit is regulated under NESHAP – 40 CFR 63, Subpart A – General Provisions; 40 CFR 63, Subpart BB – National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.403, F.A.C., Phosphate Processing, Rule 62-296.700, F.A.C., RACT Particulate Matter as well as Administrative Order No. 03-C-AP for alternative MACT monitoring plan (attachment B)}.*

2) *Specific conditions referring to E.U. No. 055 were in Section III, E in Title V operation permits prior to 0570008-081-AV. The sections were combined to simplify the permit.*

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum allowable production and heat input rates are as follows:

EU ID No.	Process Input Rate of P_2O_5	Production Rate of AP	Heat Input Rate	Fuel Type
-007 (No. 6 AP Plant)	2,060 tons per day of P_2O_5 (85.8 tons per hour daily average)	4,478 tons per day of AP (186.6 tons per hour daily average)	80.0 MMBtu/hour daily average (for the rotary dryer)	Natural Gas No. 2 Fuel Oil
-055 (No. 5 AP Plant)	1,764 tons per day of P_2O_5 (73.5 tons per hour daily average)	3,758 tons per day of AP (156.6 tons per hour daily average)	40.0 MMBtu/hour daily average (for the rotary dryer)	Natural Gas No. 2 Fuel Oil

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-296.403, 62-296.705, F.A.C.; Construction Permits AC29-196763, 0570008-044-AC / PSD-FL-336]

B.2. Methods of Operation.

Fuels. The fuels that are allowed to be burned in the rotary dryer are:

(1) Natural gas, and

(2) No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as a back-up fuel. No. 2 fuel oil shall not be fired for more than 400 hours per year.

[Rule 62-213.410, F.A.C.; Construction Permits AC29-196763, AC29-238303, 0570008-057-AC.]

B.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.

[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

Unless otherwise specified, the averaging times for Specific Conditions **B.4. - B.6.** are based on the specified averaging time of the applicable test method.

B.4. Particulate Matter (PM), Fluoride (F) and SO_2 emissions shall not exceed the rates listed below:

E.U. No.	PM/PM_{10}	Fluoride	SO_2
-007 (No. 6 AP Plant)	0.07 lb/ton of product; 12.88 lb/hr; 56.39 ton/yr	0.02 lb/ton of product; 3.00 lb/hr; 13.16 ton/yr	
-055 (No. 5 AP Plant)	0.0817 lb/ton of product; 12.8 lb/hr; 56.1 ton/yr	0.0211 lb/ton of product; 3.3 lb/hr; 14.5 ton/yr	12.7 lb/hr; 2.6 ton/yr

{Permitting Notes:

1) *The equivalent PM/PM_{10} emissions from EU 007 is 0.15 lb/ton of P_2O_5 input. The equivalent F emissions from EU 007 and EU 055 are 0.0355 lb/ton of P_2O_5 input and 0.06 lb/ton of P_2O_5 input, respectively.*
2) *The fluoride emission limit in Condition B.4. is more stringent than the applicable NESHAP, 40 CFR 63.622(a) limits of less than 0.06 lb/ton equivalent P_2O_5 feed for AP production. The permittee shall comply with Attachment B – Alternative MACT monitoring plan per Administrative Order No. 03-C-AP dated 1/5/2004 and other applicable requirements of the NESHAP, 40 CFR 63, Subparts A and BB}*

~~Particulate Matter (PM) Emissions. Particulate Matter (PM) emissions from this emission unit shall not exceed the following rates listed below:~~

~~a. 0.15 lb/ton of 100% P_2O_5 input;~~

~~b. 12.88 lbs per hour; and,~~

~~c. 56.39 tons per year.~~

[40 CFR 63.622(a); Rules 62-204.800, 62-296.700(4)(b), and 62-296.705(2)(a), F.A.C.; Construction Permits AC29-238303, 0570008-082-AC, and 0570008-044-AC/PSD-FL-336]

B.5. Visible Emissions (VE) ~~limit~~ Limitation. Visible emissions from EU 007, No. 6 AP Plant shall not exceed 20% opacity.

[Rules 62-296.705(2)(a), F.A.C. and 62-296.320(4)(b)(1), F.A.C.]

B.6. ~~Fluoride (F) Emissions Limit. Fluoride (F) emissions from this emission unit shall not exceed the following rates listed below:~~

~~a. 0.035 lb/ton of 100% P_2O_5 input;~~

~~b. 3.00 pounds per hour, and,~~

~~c. 13.16 tons per year.~~

~~[40 CFR 63.622(a); Rule 62-204.800, F.A.C.; Construction Permit 0570008-044-AC/PSD-FL-336]~~

Visible Emissions (VE) Limitation. The visible emissions from EU No. 055, No. 5 AP Plant shall not exceed 10% opacity.

[Construction Permit AC29-196763; BACT determination dated November 25, 1991]

~~*{Permitting Note: The fluoride emission limit in Condition B.6. is more stringent than the applicable NESHAP, 40 CFR 63.622(a) limits of less than 0.06 lb/ton equivalent P_2O_5 feed for AP production. The permittee shall comply*~~

~~*with Attachment B – Alternative MACT monitoring plan per Administrative Order No. 03-C-AP dated 1/5/2004 and other applicable requirements of the NESHAP, 40 CFR 63, Subparts A and BB.}*~~

Monitoring of Operations

B.7. CAM Plan. ~~This emissions unit~~ Emissions Unit EU No. 007 is subject to the Compliance Assurance Monitoring (CAM) requirements contained in the attached Appendix CAM. Failure to adhere to the monitoring requirements specified does not necessarily indicate an exceedance of a specific emissions limitation; however, it may constitute good reason to require compliance testing pursuant to Rule 62-297.310(7)(b), F.A.C.
[40 CFR 64; Rules 62-204.800 and 62-213.440(1)(b)1.a., F.A.C.]

Test Methods and Procedures

{*Permitting Note: The attached Table 2, 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.8. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from stationary sources
6	Determination of Sulfur Dioxide Emissions From Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
13A	Determination of Total Fluoride Emissions from Stationary Sources – SPADNS – Zirconium Lake Method – 40 CFR 60, Appendix A
13B	Determination of Total Fluoride Emissions from Stationary Sources – Specific Ion Electrode Method – 40 CFR 60, Appendix A

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

B.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

B.10. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU 007 shall be tested to demonstrate compliance with the emissions standards for:

E.U. No.	PM/PM_{10}	Fluoride**	SO_2*	Ammonia	VE
-007	X	X			X
-055	X	X	X	X	X

*If fuel oil has not been used for more than 400 hours in the previous 12 months then compliance testing is not required. However, prior to Permit Renewal (i.e., test during the period of 270 days prior to and no more than 365 days prior to the expiration date of this Permit.) testing will be required pursuant to Rule 62-297.310(7)(a)3, F.A.C.

*****For fluorides only,*** per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B), shall test annually to demonstrate compliance with the applicable emission standards in Condition E.4.
[40 CFR 63.626(a)(1) and 63.630(a); Rule 62-297.310(7)(a)4, F.A.C.]

~~a. particulate matter;~~
~~b. visible emissions;~~
~~c. fluorides (F).**~~

~~***For fluorides only*, per 40 CFR 63, Subpart A and BB; Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B).~~
~~[Rule 62-297.310(7), F.A.C. and Administrative Order 03-C-AP dated 1/5/2004 (Attachment B)]~~

Recordkeeping and Reporting Requirements

B.11. Compliance Test Methods. Compliance with the emission limitations of Conditions B.4, B.5., B.6. and B.8. shall be determined using EPA Methods 1, 2, 3, 4, 5, 6, 9, and 13A or 13B contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. Ammonia emissions may be determined using a modified EPA Method 6 as submitted to the Environmental Protection Commission of Hillsborough County (EPCHC) on September 12, 1989, or by any other test method agreed upon by the Department and EPCHC. ***For fluorides only,*** per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B), the Permittee shall conduct the performance (compliance) test according to the procedures in 40 CFR 63, Subparts A and BB.
[40 CFR 63.626(b) and 63.630(a); Chapter 62-297, F.A.C.]

B.12. Additional Test Report Condition. In addition to the attached Appendix RR, Facility-Wide Reporting Requirements, the information required in Specific Condition Nos. B.12, B.13 and B. 14 shall also be included in the compliance test reports.
[Rule 62-213.440(1), F.A.C.]

B.13. Production Data Report. A summary of the following production data shall be included in any compliance test report:
a. the production rate in tons per hour;
b. the raw material input rates and;
c. the start and end time for the rate determination.
[Rule 62-4.070(3), F.A.C.]

B.14. Scrubber Parameter Report. A summary of the following scrubbers' operating parameters during any compliance test shall be included in any compliance test report:
a. The scrubber identification;
b. Type of scrubber liquid;
c. Volumetric liquid flow rate (gpm), and;
d. Total gas scrubber pressure drop (inches water gauge).
[Rule 62-4.070(3), F.A.C.]

B.15. Test Report. The test reports shall include, at a minimum, the following conditions for the test period:

a. Type of fuel being fired;
b. Heat input rate (mmBtu/hr) and firing rate (Million cubic feet (MCF) per hour or gallons per hour;
c. Fuel Analysis Requirement: If testing is conducted while firing No. 2 fuel oil in the dryer, compliance with the sulfur content requirement of Specific Condition A.3. shall be demonstrated during the test by submitting either of the following:

i. A Certificate of Fuel Oil Analysis from the fuel oil vendor for the fuel used during the compliance test; or,
ii. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.

[Rules 62-4.070(3), 62-213.440(1) and 62-297.310(8), F.A.C.; Construction Permit No. 0570008-068-AC]

B.16. Fuel Oil Sulfur Content. In order to document continuing compliance with the fuel oil sulfur content Condition B.2, records shall be maintained of the sulfur content, in % by weight, of No. 2 fuel oil delivered for use in the dryer. On the basis of the requirements of Department of Agriculture and Consumer Services Rule 5F-2.001 (which requires that No. 2 oil sold in Florida have a maximum sulfur content not to exceed 0.5%), reasonable assurance that the sulfur content requirement is being met can also be provided through vendor supplied documentation that the fuel oil delivered for use in this boiler meets the specifications for No. 2 oil. The above records shall be maintained and made available to the Department and HCEPC upon request.
[Rule 62-213.440(1), F.A.C.]

B.17. Dryer Hours of Operation. In order to document compliance with the requirements of Condition B.2, the permittee shall maintain records of the dryer hours of operation while firing fuel oil.
[Rule 62-213.440(1), F.A.C.]

B.18. Certificate of Fuel Oil. If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of B.2 shall be demonstrated during the test by submitting either of the following with the test report:
a. A Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or
b. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.
[Rules 62-4.070(3); 62-213.440(1), F.A.C.]

B.19. Records: A record shall be maintained to document, at a minimum, the following in order to show compliance with the specific conditions B.1. and B.2.:

Daily

a. Facility Name, Facility ID No. (0570008), Emission Unit ID No. (EU No. 007 or 055);
b. Date;
c. AP Production Mode (DAP, ~~or~~ MAP or MicroEssentials™);
d. When operating, record hours of operation and quantity, in tons, P_2O_5 input and AP ~~of the DAP/MAP~~ production;
~~e. When operating, record the quantity, in tons, P_2O_5 input and AP production;~~
~~f. When operating, record the process rate, in tons per hour, P_2O_5 input and AP production (daily average);~~
g. The ~~quantity of natural gas and the quantity of No. 2 oil (MCF and gallons) utilized in~~ heat input rate to the rotary dryer in mmBtu/hr;
h. The sulfur content (percent, by weight) of No. 2 oil utilized in the rotary dryer. The sulfur content may be based upon vendor supplied as-delivered oil sulfur content information, or an oil analysis;
i. The total hours of rotary dryer operation using No. 2 oil;
j. Heat input rate to the rotary dryer, mmBtu/hr (daily average).

Daily record should be completed within five (5) business days.

~~Monthly~~

~~k. The total hours of rotary dryer operation using No. 2 oil for rolling consecutive 12-month period.~~

~~Monthly record should be completed by the 15th day of the following month.~~

The record shall be retained at the facility for a minimum of five (5) years and shall be made available to the Permitting and Compliance Authorities upon request.
[Rule 62-213.440(1), F.A.C; Construction Permits Nos. 0570008-068-AC and 0570008-082-AC]

B.20. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

Other Requirements

B. 21. Operation and Maintenance (O & M) Plan. The following Operation and Maintenance (O & M) Plan for Particulate Matter Control submitted by the applicant pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

Control Equipment Data

VENTURI SCRUBBERS (RGCV & DRYER)

Manufacturer:	Wellman Power Gas
Model:	N/A
Type:	Venturi Scrubbers (RGCV & Dryer)
Design total Flow:	RGCV 60,000 ACFM & DRYER 100,000 ACFM
Design Gas-to-Liquid Ratio:	RGCV 80 ACF/gal. & DRYER 115 ACF/gal.
Efficiency Rating: (at design capacity)	90%
Design Pressure Drop:	10-25" w.g.
Scrubbing Liquor Composition:	Pondwater

TAILGAS SCRUBBERS (RGCV & DRYER)

Manufacturer:	Wellman Power Gas
Model:	N/A
Type:	Tail Gas Scrubbers (RGCV & Dryer) Packed Tower, Up-Flow
Design Gas-to-Liquid Ratio:	RGCV 100 ACF/gal. & DRYER 90 ACF/gal
Design total Flow:	RGCV 60,000 ACFM & DRYER 100,000 ACFM
Efficiency Rating: (at design capacity)	99%
Design Pressure Drop:	0.5" w.g. RGCV & 0.1” w.g. Dryer
Scrubbing Liquor Composition:	Pondwater

VENTURI SCRUBBER (COOLER)

Manufacturer:	Central Maintenance and Welding, Inc.
Model:	N/A
Type:	Venturi Scrubber (COOLER)
Design total Flow:	98,000 ACFM
Design Gas-to-Liquid Ratio:	65 ACF/gal.
Efficiency Rating: (at design capacity)	90%
Design Pressure Drop:	13" w.g.
Scrubbing Liquor Composition:	Pondwater

TAILGAS SCRUBBER (COOLER)

Manufacturer:	Wellman Power Gas
Model:	N/A
Type:	Tail Gas Scrubber (Cooler) Packed Tower, Up-Flow
Design Gas-to-Liquid ratio:	57 ACF/gal
Design total Flow:	85,000 ACFM
Efficiency Rating: (at design capacity)	99%
Design Pressure Drop:	8" w.g.
Scrubbing Liquor Composition:	Pond water

Process Data

Production Rate:	186.6 TPH AP
Raw Material Input:	DAP: 12 TPH NH_3 85.8 TPH P_2O_5
Fuel Usage:	80 MMBtu/hr

Inspection and Maintenance Schedule
Scrubber operating parameters recorded as specified in permit conditions. The condition of the evacuation system, scrubber pumps and piping, fans, scrubbers and scrubber packing shall be assessed every six months.

Recordkeeping Schedule
Records of inspections, maintenance, and performance parameter data shall be retained and be made available to the Department and the Environmental Protection Commission of Hillsborough County upon request.
[Rule 62-296.700(6), F.A.C., Construction Permit AC29-227826]

B.22. Abnormal Event Reporting. **Not Federally Enforceable.** The permittee shall comply with all "abnormal events" requirements associated with these sources on a consistent basis and all abnormal events shall be reported to the Air Management Division of the Hillsborough County Environmental Protection Commission of within thirty (30) minutes of each event. "Abnormal events" would be defined as any of the following:

1. Any pipeline or vessel leak associated with the sources which results in release of uncontrolled ammonia emissions to the outside air in quantities in excess of the SARA Section 304 (Community Right-to-Know Reportable Quantity).
2. Ammonia emissions in excess of 200.0 pounds per hour during annual testing (ref. Condition B.10.). The thirty-minute notification requirement above is not applicable to this item but the test report shall address actions taken to mitigate this situation.

[Rule 62-213.440(1), F.A.C.]

NESHAP Conditions

The NESHAP conditions of E.U. Nos. 007 and 055 are placed in Subsection M. Common Conditions.

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-112	Auxiliary Boiler. The 112 MMBtu per hour, Model No. KD3-68 L auxiliary boiler manufactured by INDECK POWER EQUIPMENT COMPANY is located at the sulfuric acid complex. The auxiliary boiler is equipped to fire on natural gas only and will be used as a limited-use boiler operating at ≤ 10% annual capacity factor.

{Permitting Note: This emissions unit replaces Emissions Unit No. 043, the 130 MMBtu per hour, Model MCF5-85 auxiliary steam generator manufactured by Murray Boiler Company located at the facility's sulfuric acid complex. EU No. 043 was removed by this Title V Operation Permit (0570008-079-AV) incorporating revisions from Construction Permit 0570008-075-AC.}

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity.

a. Hourly Fuel Usage Rate: The following hourly usage rate is for the purpose of emissions testing only. The permittee is not required to show compliance with this rate during normal operation - The maximum natural gas usage rate is 109,780 cu ft/hour (@1020 Btu/SCF, 112 MMBTU/hour).

b. Annual Heat Input Capacity: The boiler is limited to a maximum annual heat input of 98,112 MMBtu/year (≤ 10% annual capacity factor) for a 12-month rolling average period. This annual capacity is based on the total heat input from the natural gas operation.

[Rule 62-210.200(PTE), F.A.C.; ~~as requested by the applicant in the~~ Construction Permit 0570008-075-AC ~~Application dated 2/18/2013~~]

{Permitting Notes:

(1) In the application dated 2/18/2013, the applicant requested a ≤ 10% annual capacity factor for the boiler with a maximum design heat input capacity of 112 MMBTU/ hour. This is equivalent to an annual capacity of 98,112 MMBTU/year for a 12-month rolling average period. This makes the boiler a limited-use boiler.

(2) Annual Capacity Factor was requested by the applicant.}

C.2. Methods of Operation. The boiler is permitted to use natural gas only as firing fuel. Natural gas shall have a maximum sulfur content of 0.05%, by weight.
[Rule 62-210.200(PTE), F.A.C.; Best Available Control Technology (BACT) Determination dated April 12, 2013]

C.3. Hours of Operation - This emissions unit may operate continuously (8,760 hours/year).
[[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

C.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

Unless otherwise specified, the averaging time for Specific Condition **C.5.** is based on the specified averaging time of the applicable test method.

C.5. Visible Emission (VE) Limit. Visible emissions from the boiler stack shall not exceed 20% opacity, except for one six-minute period per hour during which the opacity shall not exceed 27%.
[Rule 62-296.406(1), F.A.C.; 40 CFR 60.42b (Subpart Db)]

{Permitting Note: 40 CFR 60, Subpart Db SO_2 Emissions Limit - Compliance with the BACT fuel sulfur limit of 0.05% will also satisfy the "sulfur dioxide emissions standard contained in 40 CFR 60.42b(k)(2) (Subpart Db)".}

C.6. Compliance with Tune-up – The auxiliary boiler (limited-use boiler) must complete a tune-up according the manufacturer's specifications once every 5 years prior to permit renewal.
[40 CFR 63.7500(c) and Rule 62-4.070(3), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

C.7. Test Notification: The permittee shall notify the Compliance Authority in writing at least 30 days prior to the date on which each formal compliance test is to begin. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.
[Rule 62-4.070(3), F.A.C.; 40 CFR 60.7(a)(6)]

{Permitting Note: The notification should also include the relevant emissions unit ID No, test method to be used, and pollutants to be tested.}

C.8. Compliance Test Methods. Required tests shall be performed in accordance with the following reference method:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

C.9. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

C.10. Compliance Tests Prior To Renewal - Compliance tests shall be performed for VE once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Condition C**.5.**
[Rules 62-210.300(2)(a) and 62-297.310(7)(a), F.A.C.]

Recordkeeping and Reporting Requirements

C.11. Daily and Monthly Records: The permittee shall maintain the following records for the auxiliary boiler:

a. Daily Records
   (1) Facility Name, Emission Unit No. 112 and Date;
   (2) Natural gas usage record:
      (a) the hours of operation of the boiler, and
      (b) the amount of natural gas combusted in the boiler.

b. Monthly Records
   (1) Facility Name, Emission Unit No. 112, Month and Year.
   (2) Natural gas usage record: the hours of operation for the most recent 12-month rolling average period.
   (3) The annual heat input calculated on a 12-month rolling average basis with a new annual heat input calculated at the end of each calendar month.
   (4) The annual capacity factor calculated on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

Daily records shall be completed by the end of the 5th business day and monthly records shall be completed by the end of the following month.
[Rules 62-213.440(1)(b)2.b., 62-4.070(3) and 62-204.800(8)(b), F.A.C.; 40 CFR 60.49b(d)(Subpart Db)]

C.12. Natural Gas Usage Documentation – Compliance with the natural gas's 0.05%, by weight, sulfur content limitation specified in Specific Condition No. **C.2.**, shall be demonstrated as follows: The facility shall obtain and maintain fuel receipts (such as a current, valid purchase contract, tariff sheet, or transportation contract) from the fuel supplier that certify that the gaseous fuel meets the definition of natural gas as defined in 40 CFR 60.41b and the applicable sulfur limit.
[Rules 62-213.440(1)(b)2.b., 62-4.070(3) and 62-204.800(8)(b), F.A.C.; 40 CFR 60.49b(r) (40 CFR 60, Subpart Db)]

C. 14. Boiler Tune-up Documentation – Compliance with the boiler tune-up specified in Specific Condition No. **C.6.** shall be demonstrated as follows: The facility shall conduct the tune-up per manufacturer's specification and maintain record of the tune-up. A copy of the tune-up record shall be submitted along with the permit renewal application.
[Rules 62-213.440(1)(b)2.b., 62-4.070(3) and 62-204.800(8)(b), F.A.C.; 40 CFR 63.7500(c) (40 CFR 63, Subpart DDDDD)]

C. 15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

C. 16. Recordkeeping Schedule. Records of inspections, maintenance, and performance parameter data shall be retained and shall be made available to the Department and the Environmental Protection Commission of Hillsborough County (EPCHC) request.
[Rule 62-213.440(1), F.A.C.]

Other Requirements

C.17. Federal Rule Requirements. This emissions unit is subject to the applicable provisions of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, which is adopted by reference in Rule 62-204.800, F.A.C. This emissions unit is also subject to the applicable provisions of 40 CFR 63, Subpart DDDDD, National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, which is adopted by reference in Rule 62-204.800, F.A.C.
[Rules 62-204.800(8)(b) and 62-204.800(11)(b), F.A.C.]

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-051	Conveyor No. 9 Transfer Points and Railcar Unloading
-052	Conveyor No. 9 to Shipping Belt Conveyor
-053	Vessel Loading Operation
-058	Conveyor No. 6 to Conveyor No. 7
-059	Conveyor No. 7 to Conveyor No. 8
-060	Screening Tower and Conveyor No. 8 to Conveyor No. 9
-061	East Vessel Loading Facility – Shiphold/Chokefeed

The material handling system transfers MAP, DAP, calcium phosphate animal feed, and phosphate rock from the storage buildings or rail cars to marine vessels and from the storage buildings to railcars.

Particulate matter emissions generated during the transfer of materials is controlled by the baghouses and dust collectors and is minimized through good work practices (see Specific Condition No. D.5.). The belt to transfer tower transfer point is evacuated to the vessel loading operation tower baghouse (E.U. 053).

{Permitting note(s): This emissions unit is regulated under Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, RACT Particulate Matter; and Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations. The following Permit conditions have been adopted from Construction Permits AC29-234652, 0570008-065-AC and 0570008-069-AC.}

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity

a. The maximum material transfer rate for the material handling system shall not exceed 1000 tons per hour (daily average).
b. The maximum ship-loading rate shall not exceed 1000 tons per hour (daily average).

[Rules 62-4.160(2), and 62-210.200, F.A.C., Definitions - (PTE); Construction Permits AC29-234652 and 0570008-065-AC]

D.2. Methods of Operation

a. The Permittee is allowed to ship load MAP and DAP fertilizer products. Products shall be coated with a dust suppressant. Conveyors used for the transfer of MAP and DAP may operate without the existing baghouses provided that the material is coated with a dust suppressant and that visible emissions are not greater than 5% opacity.
b. The Permittee is allowed to ship load phosphate rock and calcium phosphate animal feed.
c. The Permittee is allowed to perform the railcar loading and ship loading operations simultaneously.

[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C.; Construction Permits AC29-234652 and 0570008-065-AC]

D.3. Hours of Operation. The hours of operation for the material handling sources shall not exceed the following:

E.U. ID No.	E.U. Description	Hours of Operation per Year
51	Conveyor No. 9 Transfer Points and Railcar Unloading	8000
52	Conveyor No. 9 to Shipping Belt Conveyor	8000
53	Vessel Loading Operation	8000
58	Conveyor No. 6 to Conveyor No. 7	4000
59	Conveyor No. 7 to Conveyor No. 8	6000
60	Screening Tower and Conveyor No. 8 to Conveyor No. 9	6000
061	East Vessel Loading Facility – Shiphold/Chokefeed	8000

[Rule 62-210.200, F.A.C., Definitions - (PTE); Construction Permits AC29-234652 and 0570008-065-AC]

D.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

D.5. Unconfined Emissions of Particulate Matter:
Reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter resulting from the material handling system from this facility. Reasonable precautions to be taken shall include, but not limited to, the following:

a. Partial enclosures, covered conveyors and equipment enclosures;
b. The use of a telescopic chute during ship loading;
c. Minimize the drop height as much as practicable during ship loading;
d. Using a skirt or equivalent at the bottom end of the telescopic chute to provide cover during the unloading of fertilizer product into the ship cargo hold;
e. Coating products with dust suppressants; and,
f. Restricting operating hours.

[Rule 62-296.320(4)(c), F.A.C.; Construction Permit 0570008-065-AC]

Emission Limitations and Standards
{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}
Unless otherwise specified, the averaging times for Specific Conditions **D.6. – D.7.** are based on the specified averaging time of the applicable test method.

D.6. PM Emissions Limitations. The maximum allowable particulate matter emissions from the sources below shall not exceed the following limits:

EU ID	Source Description	Baghouse PM Emissions			Fugitive PM Emissions		Total PM Emissions	
		Emission Rate (gr/dscf)	PM Emission (lb/hr)	PM Emission (TPY)	PM Emission (lb/hr)	PM Emission (TPY)	PM Emission (lb/hr)	PM Emission (TPY)
051	Conveyor No. 9 Transfer Points and Railcar Unloading	0.02	2.40	9.60	0.61	2.45	3.01	12.05
052	Conveyor No. 9 to	0.02	0.66	2.64	0.74	2.94	1.40	5.58

	Shipping Belt Conveyor							
053	Vessel Loading Operation	0.02	0.84	3.36	0.61	2.45	1.45	5.81
058	Conveyor No. 6 to Conveyor No. 7	0.02	0.60	1.20	0.25	0.49	0.85	1.69
059	Conveyor No. 7 to Conveyor No. 8	0.02	0.60	1.80	0.25	0.74	0.85	2.54
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9	0.02	4.11	12.34	0.49	1.47	4.60	13.81
061	East Vessel Loading Facility – Shiphold/Chokefeed	N/A	0.10	0.42				
Total				31.36		10.55		41.91

[Rule 62-296.700, F.A.C.; Construction Permits AC29-234652 and 0570008-065-AC]

D.7. Visible Emissions (VE) Limitations. The permittee shall not cause, allow or permit any visible emissions (5% opacity) from each of the material handling sources except, visible emissions from the ship hold of up to 10% opacity are allowed.
[Rule 62-296.711(2)(a), F.A.C.; Construction Permit 0570008-065-AC]

Monitoring of Operations

D.8. Reasonable Assurance. In order to provide reasonable assurance that the pollution control equipment is operating properly, the permittee shall comply with the minimum limitation in the attached table of control device parameters for the Material Handling System.

EU No.	Emission Unit Description	**Parameter**	**Minimum Limitation**
051	Conveyor No. 9 Transfer Points and Railcar Unloading	Visible Emissions	No Visible Emissions
052	Conveyor No. 9 to Shipping Belt Conveyor	Visible Emissions	No Visible Emissions
053	Vessel Loading Operation	Visible Emissions	No Visible Emissions
058	Conveyor No. 6 to Conveyor No. 7	Visible Emissions	No Visible Emissions
059	Conveyor No. 7 to Conveyor No. 8	Visible Emissions	No Visible Emissions
060	Screening Tower and Conveyor No. 8 to Conveyor No. 9	Visible Emissions	No Visible Emissions

Reasonable assurance for the minimum limitation of visible emissions shall be provided by VE observation using EPA Method 22 when the EU is in operation, especially for the ship loading operation.
[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-069-AC]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

D.9. Test Methods. Required tests shall be performed in accordance with the following reference method:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from stationary sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
22	Visual Determination of Fugitive Emissions from Material Sources

The above method is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rules 62-204.800, 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

D.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

D.11. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU Nos. 051, 052, 053, 058, 059, & 060 shall be tested to demonstrate compliance with the emissions standard for:

a. visible emissions (VE),
b. particulate matter (PM)*.

*NOTE: Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because these sources are equipped with baghouses, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby allows a visible emission limitation not to exceed an opacity of 5% in lieu of the particulate matter (PM) stack tests for the six baghouse / dust collector exhausts.
[Rules 62-297.310(7) (a)1. and 62.4.070(3), F.A.C.; Construction Permit 0570008-065-AC]

D.12. Annual Compliance Test for sources not totally enclosed. Test the following sources which are not totally enclosed and evacuated to a baghouse for visible emissions (VE) during each federal fiscal year (October 1 – September 30):

a. the railcar loading operation, and,
b. the ship's hold.

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

D.13. Compliance test for changing of dust suppressant. The permittee shall conduct a visible emissions performance test within 30 days of changing the type(s) or brand of dust suppression oils used at the material handling system. The report shall at a minimum include the following:

a. The specific type of dust suppression oil to be used (include a MSDS sheet on this material if available);
b. The point of application of the dust suppression oil, the minimum rate at which it will be applied, and a description of how the rate of application will be controlled and measured (for the purposes of recordkeeping);
c. Statement of the results of observation of visible emissions from transfer and loading points when dust suppression oil is being applied at the minimum rate.

[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-065-AC]

Recordkeeping and Reporting Requirements

D.14. Daily Log. In order to document compliance with the specific conditions D.1. and D.3., the permittee shall maintain the daily records of the following information:

a. the source ID Number
b. the hours of operation,
c. the amount of material transferred,
d. the amount of material loaded to ships,
e. the total hours of operation for each baghouse for the year,
f. for each period of operation, a statement of whether the dust control system (baghouses/dust collectors) was in service or whether dust suppressant oil was being applied to the product being processed, and,
g. for each period when dust suppressant oil was being used to control particulate emissions, a description of, and rate of application of the suppressant oil in gpm and gal/ton of material handled.

The daily log must be completed by the 3rd business day and shall be retained at the facility for a minimum of five (5) years and shall be made available to the Environmental Protection Commission of Hillsborough County (EPCHC) upon request.
[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-065-AC]

D.15. Pressure Drop and / or dust suppressant monitoring. The pressure drop across each baghouse and/or the type and amount of dust suppression oil shall be monitored during each compliance test. A summary of this data shall be included in each emissions test report.
[Rule 62-297.310(8), F.A.C.; Construction Permit 0570008-065-AC]

D.16. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

Other Requirements

Operation and Maintenance Plan

D.17. Operation and Maintenance Plan for PM Control. The following Operation and Maintenance (O & M) Plan for Particulate Matter Control submitted by the applicant pursuant to Rule 62-296.700(6), F.A.C., shall be followed:

Control Equipment Data

Conveyor No. 9 Transfer Points and Railcar Unloading (EU No. 051)

Manufacturer:	CECOaire / Kirk & Blum
Model Name/Number:	SEWI-10-183-2859
Bag Material:	Polyester felt
Design Flow Rate:	14,000 ACFM
Air to Cloth Ratio:	4.89:1
Efficiency Rating:	99.5%
Pressure Drop:	4 - 6" wc
Bag Cleaning Method:	Compressed air pulse

Conveyor No. 9 to Shipping Belt Conveyor (EU No. 052)

Manufacturer:	CECOaire / Kirk & Blum
Model Name/Number:	HESA-8-72-905
Bag Material:	Polyester felt
Design Flow Rate:	3,850 ACFM
Air to Cloth Ratio:	4.25:1
Efficiency Rating:	99.5%
Pressure Drop:	4 - 6" wc
Bag Cleaning Method:	Compressed air pulse

Vessel Loading Operation (EU No. 053)

Manufacturer:	Flex Kleen
Model Name/Number:	100-WM-192-TR10
Bag Material:	Polyester felt
Design Flow Rate:	4,900 ACFM
Air to Cloth Ratio:	3.61:1
Efficiency Rating:	99.5%
Pressure Drop:	4 - 6" wc
Bag Cleaning Method:	Compressed air pulse

Conveyor No. 6 to Conveyor No. 7, Conveyor No. 7 to Conveyor No. 8, Screening Tower and Conveyor No. 8 to Conveyor No. 9 (EU Nos. 058, 059, 060), three identical baghouses

Manufacturer:	Fuller Company
Model Name/Number:	168 C 10
Bag Material:	Polyester felt
Design Flow Rate:	24,000 ACFM
Air to Cloth Ratio:	5.29:1
Efficiency Rating:	99.5%
Pressure Drop:	4 - 6" wc
Bag Cleaning Method:	Compressed air pulse

Process Data

Material Handling Rate:	1000 TPH

Inspection and Maintenance Schedule

Records of inspections, maintenance, and performance parameter data shall be retained and shall be made available to the Department or Environmental Protection Commission of Hillsborough County (EPCHC) upon request.
[Rule 62-296.700(6)(e), F.A.C.]

Subsection E. ~~Emissions Unit No. 055~~ (Reserved)

{Permitting Note: Title V Permit Revision 0570008-081-AV moved the entire Subsection III E for Emissions Unit No. 055, No. 5 AP Plant to Subsection III.B. Refer to Subsection III.B for EU No. 055 and its specific conditions.}

~~**The specific conditions in this section apply to the following emissions unit:**~~

~~**EU No.**~~	~~**Brief Description**~~
~~055~~	~~No. 5 Granulation Plant~~

~~The ammoniated phosphate (AP) manufacturing plant (No. 5 Granulation Plant) has a maximum daily average production capacity of 156.6 tons/hr. AP is manufactured by reacting anhydrous ammonia and phosphoric acid in a sealed reaction tank and then by further adding ammonia to the ammoniated acid in a rotary reactor-granulator. The granulated un-sized AP exits the granulator and is dried in a rotary dryer. The dried material is then screened and the oversized and undersized material is recycled back to the granulator. The product is then cooled in a rotary drum cooler, screened, and sent to storage. Emissions from the process are controlled by three venturi scrubbers in parallel, then two up-flow packed-bed scrubbers exhausting into a common stack.~~

~~*{Permitting note. This emission unit is regulated under NESHAP – 40 CFR 63, Subpart A – General Provisions; 40 CFR 63, Subpart BB – National Emission Standards for Hazardous Air Pollutants From Phosphate Fertilizers Production Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Administrative Order No. 03-C-AP for alternative MACT monitoring plan (attachment B); Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.403, F.A.C., Phosphate Processing.; and Rule 62-296.700, F.A.C., RACT Particulate Matter.}*~~

~~**Essential Potential to Emit (PTE) Parameters**~~

~~**E.1.** Permitted Capacity. The maximum allowable process input, production and heat input rates are as follows:~~

~~Process Input Rate of P_2O_5, tons per hour (daily average)~~	~~Production Rate of AP (dry basis), tons per hour (daily average)~~	~~Heat Input Rate to Rotary Dryer, MMBtu/hr (monthly average)~~	~~Fuel Type~~
~~73.5~~	~~156.6~~	~~40.0~~	~~Natural Gas, No. 2 Fuel Oil~~

~~[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), and 62-296.403, F.A.C.; Construction Permit AC29-196763]~~

~~**E.2.** Methods of Operation~~

~~a. *Fuels.* The fuels that are allowed to be burned in this unit/these units are:~~
~~(1) Natural gas, and,~~
~~(2) No. 2 fuel oil with a maximum sulfur content of 0.5% by weight as a back-up fuel.~~
~~No. 2 fuel oil shall not be fired for more than 400 hours per year.~~

~~b. Fugitive emissions from the process, conveying and storage equipment shall be controlled by sealing and/or venting particulate and fumes from the equipment to the pollution abatement system.~~

~~[Rule 62-213.410, F.A.C.; Construction Permits AC29-196763 and AC29-238303]~~

~~**E.3.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.~~

~~[Rule 62-297.310(2), F.A.C.]~~

Subsection E. ~~Emissions Unit No. 055~~ (Reserved)

~~Emission Limitations and Standards~~

~~{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}~~

~~Unless otherwise specified, the averaging time for Specific Condition **E.4.**is based on the specified averaging time of the applicable test method.~~

~~E.4.~~ ~~Pollutant Emission Limits. Emissions from the No. 5 Granulation Plant shall not exceed any of the following:~~

~~Pollutant~~	~~Maximum Allowable Emissions~~		
	~~Pounds per Ton of Equiv. P_2O_5 Feed~~	~~Pound per Hour[1]~~	~~Tons per Year[1]~~
~~PM/PM_{10}~~		~~12.8~~	~~56.1~~
~~SO_2~~		~~12.7~~	~~2.6~~
~~Fluoride~~	~~0.06~~	~~3.3~~	~~14.5~~

~~[1]Reference: Construction Permit AC29-238303~~
~~40 CFR 63.622(a)~~

~~E.5.~~ ~~Visible Emission (VE) Limit. The visible emissions from the No. 5 Granulation Plant shall not exceed 10% opacity.~~
~~[Construction Permit AC29-196763; BACT determination dated November 25, 1991]~~

~~Test Methods and Procedures~~

~~{Permitting Note: The attached Table 2, 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.~~ ~~Test Methods. Required tests shall be performed in accordance with the following reference methods:~~

~~Method~~	~~Description of Method and Comments~~
~~1-4~~	~~Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content~~
~~5~~	~~Determination of Particulate Matter Emissions from Stationary Sources~~
~~9~~	~~Visual Determination of the Opacity of Emissions from Stationary Sources~~
~~13A~~	~~Determination of Total Fluoride Emissions from Stationary Sources – SPADNS – Zirconium Lake Method – 40 CFR 60, Appendix A~~
~~13B~~	~~Determination of Total Fluoride Emissions from Stationary Sources – Specific Ion Electrode Method – 40 CFR 60, Appendix A~~

~~The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.~~
~~[Rule 62-297.401, F.A.C.]~~

~~E.7.~~ ~~Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.~~
~~[Rule 62-297.310, F.A.C.]~~

~~**E.8.** Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU 055 shall be tested to demonstrate compliance with the emissions standards for:~~

~~a. Particulates (PM/PM_{10})~~
~~b. Opacity~~
~~c. Fluoride**~~
~~d. Sulfur Dioxide*~~
~~e. Ammonia~~

~~*If fuel oil has not been used for more than 400 hours in the previous 12 months then compliance testing is not required. However, prior to Permit Renewal (i.e., test during the period of 270 days prior to and no more than 365 days prior to the expiration date of this Permit.) testing will be required pursuant to Rule 62-297.310(7)(a)3, F.A.C.~~

~~***For fluorides only,* per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B), shall test annually to demonstrate compliance with the applicable emission standards in Condition E.4.~~
~~[Rule 62-297.310(7)(a)4, F.A.C., 40 CFR 63.626(a)(1) and 63.630(a)]~~

~~**E.9.** Compliance Test Methods. Compliance with the emission limitations of Conditions E.4, E.5 and E.6 shall be determined using EPA Methods 1, 2, 3, 4, 5, 6, 9, and 13A or 13B contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. Ammonia emissions may be determined using a modified EPA Method 6 as submitted to the Environmental Protection Commission of Hillsborough County (EPCHC) on September 12, 1989, or by any other test method agreed upon by the Department and EPCHC. *For fluorides only,* per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B), the Permittee shall conduct the performance (compliance) test according to the procedures in 40 CFR 63, Subparts A and BB.~~
~~[Chapter 62-297, F.A.C., 40 CFR 63.626(b) and 63.630(a)]~~

~~**Recordkeeping and Reporting Requirements**~~

~~**E.10.** Additional Test Report Condition. In addition to the attached Appendix RR, Facility-Wide Reporting Requirements, the specific conditions E.11 and E.12 shall also be included in the compliance test reports.~~
~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.11.** Production Data Report. A summary of the following production data shall be included in any compliance test report:~~

~~a. Daily average DAP product weight in tons/hr. (dry basis).~~
~~b. Tons/hr. of P_2O_5 input.~~
~~c. Type and quantity of fuel used.~~
~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.12.** Scrubber Parameter Report. A summary of the following scrubbers' operating parameters during any compliance test shall be included in any compliance test report:~~

~~a. The scrubber identification;~~
~~b. Type of scrubber liquid;~~
~~c. Volumetric liquid flow rate (gpm) and fan current (amps), and;~~
~~d. Total gas pressure drop ("w.g.).~~
~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.13.** Compliance with fuel oil sulfur content limitation. If testing is conducted while firing fuel oil in the dryer, compliance with the sulfur content requirement of E.2 shall be demonstrated during the test by submitting either of the following with the test report:~~

~~a. A Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or~~

~~b. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.~~

~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.14.** Fuel Oil Sulfur Content. In order to document continuing compliance with the fuel oil sulfur content Condition E.2, records shall be maintained of the sulfur content, in % by weight, of No. 2 fuel oil delivered for use in the dryer. On the basis of the requirements of Department of Agriculture and Consumer Services Rule 5F-2.001 (which requires that No. 2 oil sold in Florida have a maximum sulfur content not to exceed 0.5%), reasonable assurance that the sulfur content requirement is being met can also be provided through vendor supplied documentation that the fuel oil delivered for use in this dryer meets the specifications for No. 2 oil. The above records shall be maintained and made available to the Department and EPCHC upon request.~~

~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.15.** Dryer Hours of Operation. In order to document compliance with the requirements of Condition E.2, the permittee shall maintain records of the dryer hours of operation while firing fuel oil.~~

~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.16.** Abnormal Event Reporting. **Not Federally Enforceable.** The permittee shall comply with all "abnormal events" requirements associated with these sources on a consistent basis and all abnormal events shall be reported to the Air Management Division of the Environmental Protection Commission of Hillsborough County within thirty (30) minutes of each event. "Abnormal events" would be defined as any of the following:~~

~~1. Any pipeline or vessel leak associated with the sources which results in release of uncontrolled ammonia emissions to the outside air in quantities in excess of the SARA Section 304 (Community Right-to-Know Reportable Quantity).~~

~~2. Ammonia emissions in excess of 200.0 pounds per hour during annual testing (ref. Conditions E.2.b. and E.8). The thirty-minute notification requirement above is not applicable to this item but the test report shall address actions taken to mitigate this situation.~~

~~[Rule 62-213.440(1), F.A.C.]~~

~~**E.17.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.~~

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

~~**Other Requirements**~~

~~**E.18.** NSPS Requirements. In addition to the specific conditions listed above, these emissions units are also subject to the applicable requirements contained in 40 CFR 60, Subpart A – General Provisions and 40 CFR 60 Subpart V – Standards of Performance of Phosphate Fertilizer Industry: Diammonium Phosphate plants.~~

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

~~**NESHAP Conditions**~~

~~The NESHAP conditions of E.U. No. 055 are placed in Subsection M. Common Conditions.~~

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-063	Molten Sulfur Storage and Handling System -- Tanks #1, 2, and 3
-066	Molten Sulfur Storage and Handling System -- Pit #7
-067	Molten Sulfur Storage and Handling System -- Pit #8
-068	Molten Sulfur Storage and Handling System -- Pit #9
-074	Molten Sulfur Storage and Handling System -- Truck Loading Station

The Molten Sulfur System consists of storage tank nos. 1, 2 and 3 (capacity of 19,845 tons, i.e., 18,000 Metric Tons each), covered storage pit nos. 7, 8 and 9 (capacity of 127 tons, i.e., 115 Metric Tons, 127 tons, i.e., 115 Metric Tons, and 160 tons, i.e., 145 Metric Tons respectively), a ship unloading dock, truck loading station and associated transfer pumps and piping for storage and handling of molten sulfur. A wet scrubber is used for control of emissions from the molten sulfur storage tank nos. 1, 2 and 3 as well as the truck loading station. Emissions from loading the three molten sulfur storage pits are uncontrolled, although they are equipped with covers.

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

Essential Potential to Emit (PTE) Parameters

F.1. Capacity

a. Molten sulfur from ships may be transferred to any combination of the three (3) molten sulfur storage tanks at a combined maximum total rate of 2,240 tons/hr. (daily average).

b. The three (3) molten sulfur storage tanks may receive from ships a combined maximum total of 2,277,081 tons of molten sulfur per any consecutive 12-month period.

{Permitting Note: The emissions from the three tanks shown in Table CR-EU1-G8 (12/3/2002 version) of the Title V Permit Renewal application (DEP Project No. 0570008-040-AV), represent a worst case scenario when tanks receive an equal amount of molten sulfur (3 x 759,027 tons = 2,277,081 tons). Thus, when one tank receives more than 759,027 tons per any 12 consecutive month period, the overall emissions from the three (3) tanks combined will be less than if the three (3) tanks received equal amounts.}

c. Each of the three (3) molten sulfur storage pits may receive molten sulfur from the three (3) molten sulfur storage tanks at a constant rate of 336 tons/hr. and/or by truck. The constant rate is based on the pump's operating specifications.

d. Molten Sulfur Storage Pit Nos. 7, 8, and 9 are each allowed to transfer molten sulfur to Sulfuric Acid Plant Nos. 7, 8, and 9, respectively, at a maximum throughput rate of 492,361 tons per any consecutive 12 month period.

e. The molten sulfur truck loading station may receive molten sulfur from the three (3) molten sulfur storage tanks at a constant rate of 336 tons/hr. The constant rate is based on the pump's operating specifications.

f. The molten sulfur truck loading station may load one truck at a constant rate of 336 tons/hr. The constant rate is based on the pump's operating specifications.

g. The molten sulfur truck loading station may receive from the three (3) molten sulfur storage tanks a maximum total of 800,000 tons of molten sulfur per any consecutive 12-month period.

h. The molten sulfur storage tanks may receive molten sulfur from a ship at the same time molten sulfur is being loaded into trucks.

[Rules 62-210.200, F.A.C., Definitions - (PTE), 62-296.340(5)(c) (escape BART); Construction Permits 0570008-030-AC and 0570008-061-AC (BART Exemption Project)]

F.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

F.3. Visible Emissions (VE) Limitation. Visible emissions from any emission point in the molten sulfur facility shall not exceed 10 percent opacity (six minute average), except, visible emissions of sulfur particulate matter during ship unloading shall not exceed 15 percent opacity (six minute average). Note, when the scrubber controls emissions from a truck being loaded with molten sulfur and a molten sulfur storage tank being loaded from a ship simultaneously, visible emissions shall not exceed 10% opacity (six-minute average).
[Construction Permits 0570008-029-AC and 0570008-030-AC]

F.4. Sulfur Particulates Emission Rate Limitations. Sulfur particulate emissions from the scrubber controlling the group of three (3) molten sulfur storage tanks and the molten sulfur truck loading station shall not exceed 0.03 grains per dry standard cubic feet (gr/dscf).
[Construction Permit 0570008-030-AC]

F.5. Sulfur Particulates Emission Limitations. Pursuant to Rule 62-296.411(5)(b), sulfur particulate matter emissions from each molten sulfur handling source shall not exceed 1 ton per year (See Condition F.4.).
[Construction Permits AC29-239262, 0570008-029-AC and 0570008-036-AC/PSD-FL-315]

Test Methods and Procedures

{Permitting Note: The attached Table 2, 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.6. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C., Construction Permit 0570008-030-AC]

F.7. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

F.8. Compliance Tests Required.

a. Annual Testing. To determine compliance with Condition F.3, the permittee shall test for visible emissions (VE) during each federal fiscal year (October 1 – September 30), during the following scenarios: [1] while the scrubber is operating, test for visible emissions while ships are unloaded (15% opacity limit); [2] while the scrubber is operating, test for visible emissions while trucks are loaded and any ships are unloaded (10% opacity); and [3] for visible emissions (VE) from Molten Sulfur Storage and Handling System -- Pit #7 (E.U. No. 066), Molten Sulfur Storage and Handling System -- Pit #8 (E.U. No. 067), and Molten Sulfur Storage and Handling System -- Pit #9 (E.U. No. 068) (10% opacity limit), while each pit is receiving molten sulfur from the molten sulfur storage tanks and/or truck. Since the opacity requirement for testing item [2] is more stringent than testing item [1], the testing requirement [1] may be waived at the permittee's option.

b. Testing Every Five (5) Years. At least 270 days prior to and no more than 365 days prior to the expiration date of this Title V Permit, the permittee shall [1] test the scrubber's outlet emissions for sulfur particulate emissions and visible emissions; [2] test for visible emissions from the stack of each of the three (3) molten sulfur storage tanks while the scrubber is not operating (10% opacity limit).

[Rule 62.297.310(7), F.A.C.; Construction Permits 0570008-030-AC and 0570008-036-AC/PSD-FL-315]

{Permitting Note: At the permittee's option: If sulfur particulate emission compliance tests are also conducted on the scrubber's inlet to determine the scrubber's actual collection efficiency of sulfur particulate, which can be used to demonstrate the actual sulfur particulate emissions from the scrubber plus the fugitive sulfur particulate emissions for the emission unit is less than 1 ton/yr., then the weight emission limitation of Condition F.4. will not be applicable for that emission units. Thus, future sulfur particulate emission testing will also not be required. If the permittee selects this option, the permittee shall meet with the Air Compliance Section of the EPCHC for prior approval of a test protocol to ensure proper test methods and procedures (i.e., testing at maximum permitted capacities) are implemented. The permittee shall then submit to the Department a Title V Permit Revision Application, which shall include, but not be limited to, the results of the emissions test and supporting emissions estimates to request the removal of the sulfur particulate limit. [Construction Permit 0570008-030-AC]}

F.9. Particulate Matter (PM) Compliance Method. Compliance with the particulate matter (PM) limitation of Condition F.4. shall be determined using EPA Methods 1, 2, 4, and 5 contained in 40 CFR 60, Appendix A and adopted by reference in Chapter 62-297, F.A.C. An acetone wash shall be used. A filter box or probe heat shall not be used. The sampling port shall be a minimum of eight (8) stack diameters downstream and a minimum of two (2) stack diameters upstream from any airflow disturbances.
The minimum requirements for stationary point source emissions test procedures and reporting shall be in accordance with Chapter 62-297, F.A.C. and 40 CFR 60, Appendix A. The test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur.

[Rule~~s~~ 62-297 F.A.C.; 40 CFR 60, Appendix A; Construction Permit 0570008-036-AC/PSD-FL-315]

Recordkeeping and Reporting Requirements

F.10. Scrubber and Molten Sulfur Recordkeeping. The permittee shall record the following information:

ONCE EVERY EIGHT HOURS OF OPERATION (per Construction Permits 0570008-029-AC and 0570008-030-AC)

a. Scrubber's pressure drop, in inches of water.

b. Scrubber's liquid flow rate, in gallons per minute (gpm).

DAILY

c. For the molten sulfur storage tanks:

(i) For each tank - Total operating hours of receiving molten sulfur from ship(s).

(ii) For each tank - The total amount of molten sulfur received from ships, in tons.

(iii) For each tank - Calculate the daily average loading rate of molten sulfur received from ships, in tons/hr.

(iv) For the period of time when 2 and/or 3 tanks are receiving molten sulfur from a ship simultaneously:

(a) Identify which tanks are receiving molten sulfur.

(b) Record the start and end times of the tanks receiving molten sulfur simultaneously.

(c) Record the amount of molten sulfur each tank received, in tons.

(d) Record the combined total amount of molten sulfur the tanks received, in tons.

(e) Calculate and record the tanks average tons/hr. molten sulfur receiving rate.

d. For **each** molten sulfur storage pit:

(i) The total operating hours of receiving molten sulfur from the molten sulfur storage tanks and/or trucks.

(ii) The total amount of molten sulfur received from the molten sulfur storage tanks and/or trucks, in tons. Note, per No. 11 of the Permittee's letter dated October 23, 2000 (see Construction Permit 0570008-030-AC), transfer rates of molten sulfur to the pits are calculated daily based on the amount of sulfuric acid produced, the Sulfuric Acid Plant conversion efficiency, and molten sulfur inventory.

e. For the truck loading station:

(i) The total **actual** hours of loading molten sulfur into trucks.
(ii) The total amount of molten sulfur loaded into each truck, in tons.

WEEKLY

f. Document when drip pans or other secondary containment of spilled molten sulfur were cleaned.

MONTHLY

g. For **each** molten sulfur storage tank:

(i) Total amount of molten sulfur received from ships, in tons.

(ii) The most recent consecutive 12 month period total of molten sulfur received from ships, in tons.

h. For **all** molten sulfur storage tanks, record the most recent combined consecutive 12 month period total of molten sulfur received from ships, in tons.

i. For **each** molten sulfur storage pit:

(i) Total amount of molten sulfur received from the molten sulfur storage tanks and/or trucks, in tons.

(ii) The most recent consecutive 12 month period combined total of molten sulfur received from the molten sulfur storage tanks and/or trucks, in tons.

j. For **all** the molten sulfur storage pits, record the most recent consecutive 12 month period combined total of molten sulfur received from the molten sulfur storage tanks and/or trucks, in tons.

k. For the truck loading station, record the most recent consecutive 12 month period total of molten sulfur loaded into trucks, in tons.

l. Document that all vent surfaces to remove captured particulates were cleaned.

The records shall be maintained at the facility for at least 5 years and made available to the Department or the Environmental Protection Commission of Hillsborough County (EPCHC) upon request. Daily records shall be completed by the end of the next business day, weekly records shall be completed by the end of the next week, and monthly records shall be completed by the end of the next month.

[Rules 62-4.070(3) and 62-213.440, F.A.C.; Construction Permit 0570008-030-AC]

F.11. Sulfur Spill Recordkeeping. **Not Federally Enforceable.** The permittee 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 five (5) years and shall be available for inspection by the Department or the Environmental Protection Commission of Hillsborough County (EPCHC) upon request.
[Rule 62-213.440(1)(b)2.b., F.A.C.; Construction Permit 0570008-030-AC]

F.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

Other Requirements

F.13 The Permittee shall employ at a minimum the following practices to minimize emissions of sulfur particulate matter:

a. The scrubber shall be operating when trucks are being loaded with molten sulfur as well as when a molten sulfur storage tank receives molten sulfur from a ship.
[Rule 62-210.650, F.A.C.]

b. The following operational procedures shall be performed to minimize spills from any moveable loading arm or pipe upon disconnection, reconnection or operation:

(i) Ship to Molten Sulfur Storage Tanks - Mosaic Fertilizer, Inc.'s "Sulfur Unloading Procedure" revised January 3, 2000 attached to the permittee's letter dated December 28, 2000 (see Construction Permit 0570008-030-AC).

(ii)Truck to Pits - Mosaic Fertilizer, Inc.'s "Operating Procedure Sulfur Truck Unloading", which states:

Sulfur trucks can be unloaded at the sulfur pits in the acid plants. Each truck is weighed in at the front gate, gate personnel notify acid plant operator of truck arrival. The truck driver then follows the following procedures to minimize spillage during connection, operation, and disconnection of the truck unloading operation:

- back truck to pit
- ensure the pit high level alarm light is not on
- remove pit chute cover
- remove hose cap and affix unloading hose to pit chute

- open valve on truck to begin unloading sulfur
- monitor sulfur pit level via high level alarm until truck is emptied
- immediately close valve in the case of high level alarm on pit or sulfur leakage at hose connection
- close valve on truck
- remove hose and replace hose cap prior to vehicle operation
- replace pit chute cap
- in case of any spillage notify shift supervisor immediately.

(iii) Truck Loading Station – Mosaic's Truck Loading Station Operating Procedures as included in Attachment CR-EU1-J7 of the Permittee's July 20, 2002 Title V Revision Application (DEP Project No. 0570008-040-AV).

[Construction Permit 0570008-030-AC]

c. The Permittee shall comply with the reasonable precautions for unconfined particulate emissions contained in this Title V Permit in addition to the following precautions:

(i) Wet sweeping and/or vacuum sweeping of roads as needed (dry sweeping is prohibited).

(ii) Limiting vehicular traffic to paved areas and to less than 14 miles per hour (mph).

[Rule 62-296.320(4)(c), F.A.C.; and Construction Permit 0570008-030-AC]

Subsection G. Emissions Unit No. 073

The specific conditions in this section apply to the following emissions unit:

EU No.	Brief Description
-073	Phosphoric Acid Production Facility

The phosphoric acid plant has two trains, one with the Dorrco reactor and the other with the Prayon reactor, and is permitted at a total design feed rate of 170 tons per hour of equivalent P_20_5 feed input. The Dorrco reactor train is fed with wet ground phosphate rock via the No. 13 Ball Mill and attendant tanks, along with sulfuric acid and the reaction product stream goes via a digester stage to No. 1 and No. 2 Filters from which the bottoms acid stream go on to the clarification, evaporator stages. Two flash coolers, condenser and related equipment systems, the North and South Coolers are associated with this Dorrco train. Fluoride emissions are controlled by two scrubbers. The Dorrco reactor and digester emissions go to the Dorrco Digester Scrubber (C-02) which exhausts to atmosphere via the 300' Odor Stack (EP-01) and the two filter emissions go to the No. 1 & No. 2 Filter Scrubber (C-03), referred to also as the Vescor scrubber, and this scrubber exhausts to the atmosphere via the No. 1 & No. 2 Filter Scrubber Stack (EP-02).

The Prayon reactor train is fed with wet ground phosphate rock via the No. 14 Ball Mill and attendant tanks, along with sulfuric acid and the reaction product stream goes to the No. 3 Filter from which the bottoms acid stream goes to the same clarification, evaporator stages as in the case on the Dorrco reactor train. Fluoride emissions are controlled, again, by two scrubbers. The Prayon reactor emissions go to the Prayon Reactor Scrubber (C-Ol) which exhausts to atmosphere via the 300' Odor Stack (EP-01) and the filter emissions go to the No. 3 Filter Scrubber (C-04), referred to also as the Vescor replica scrubber, and this scrubber exhausts to the atmosphere via the No.3 Filter Scrubber Stack (EP-03).

{Permitting notes: This emission unit is regulated under NESHAP - 40 CFR 63, Subpart A - General Provisions; 40 CFR 63, Subpart AA - National Emission Standards for Hazardous Air Pollutants From Phosphoric Acid Manufacturing Plants, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Administrative Order No. 03-C-AP for alternative MACT monitoring plan (attachment B); 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.}

Essential Potential to Emit (PTE) Parameters

G.1. Permitted Capacity. The maximum phosphoric acid production rate shall not exceed a daily average of 170 tons of P_2O_5 per hour.

EU No.	Production Rate (Tons of P_2O_5 per hour, daily average)
073	170

[Rules 62-4.160(2), 62-204.800, 62-210.200, Definitions - (PTE), 62-296.403, F.A.C.; Construction Permit 0570008-004-AC/PSD-FL-231]

{Permitting Note: See Conditions M.15 and M.16 (Common Conditions) for NESHAP requirements for monitoring and recordkeeping of the equivalent P_2O_5 feed rate.}

G.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

Unless otherwise specified, the averaging time(s) for Specific Condition **G.3.** is based on the specified averaging time of the applicable test method.

G.3. Fluoride (F) Emissions Limit. Total fluoride emissions from these plants shall not exceed the following:
a. 0.012 lbs./ton of equivalent P_2O_5 feed[(1)].
b. 2.04 lbs./hr.
c. 8.9 tons/yr.
[40 CFR.63.602(a); Construction Permit 0570008-036-AC/PSD-FL-315]

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

{Permitting Note: The fluoride emission limit in Condition G.3. is more stringent than the applicable NESHAP, 40 CFR 63.602(a) limit of 0.02 lb/ton of equivalent P_2O_5 feed. The permittee shall also comply with Administrative Order 03-C-AP dated 1/5/2004 (Attachment B) and applicable requirements of the NESHAP, 40 CFR 63, Subparts A and AA}

Test Methods and Procedures

{Permitting Note: The attached Table 2, 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.4. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
13A	Determination of Total Fluoride Emissions from Stationary Sources – SPADNS – Zirconium Lake Method – 40 CFR 60, Appendix A
13B	Determination of Total Fluoride Emissions from Stationary Sources – Specific Ion Electrode Method – 40 CFR 60, Appendix A

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

G.5. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

G.6. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU 073 (3 scrubbers) shall be tested to demonstrate compliance with the emissions standards for fluoride specified in Specific Condition No. G.3. and other applicable standards of 40 CFR 63, Subpart AA.
[Rule 62-297.310(7)(a)4, F.A.C., 40 CFR 63.606(a)(1) and 63.609(a); Construction Permit 0570008-036-AC / PSD-FL-315]

Recordkeeping and Reporting Requirements

G.7. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

NESHAP Conditions

The NESHAP conditions of E.U. No. 073 are placed in Subsection M. Common Conditions.

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-078	Animal Feed Ingredient (AFI) Plant No. 1
-079	Diatomaceous Earth (DE) Silo
-080	Limestone Silo
-081	Animal Feed Ingredient (AFI) Product Loadout System
-103	Animal Feed Ingredient (AFI) Plant No. 2

The Animal Feed Ingredient (AFI) facility consists of defluorinated acid batch tanks (3) and granulation system along with diatomaceous earth and limestone unloading systems, and the AFI loadout system. Emissions from loading and unloading activities are controlled by baghouses.

Acid Defluorination System: Emissions from the defluorination system are controlled by a new packed bed cross flow scrubber

AFI Plant No. 1: Emissions from the granulation and material handling system are controlled by a venturi scrubber.

Emissions from the Acid Defluorination System packed bed scrubber and AFI Plant No. 1 venturi scrubber are vented to a common stack.

AFI Plant No. 2: Emissions from the granulation system and material handling system are controlled by two venturi scrubbers. These two venturi scrubbers are vented to a common stack.

{Permitting notes: These emissions units are regulated under Rule 62-212.300, F.A.C., General Preconstruction Review Requirements; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-296.403, F.A.C., Phosphate Processing; Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, F.A.C., RACT Particulate Matter; Rule 62-296.705, F.A.C., Phosphate Processing Operations; and Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations.}

Essential Potential to Emit (PTE) Parameters

H.1. Permitted Capacity. The maximum production, natural gas usage and new No. 2 fuel oil usage rates are as follows:

EU Nos.	Production Rate, tons per day (tons per hour daily average)	Maximum Natural Gas Usage Rate for AFI Plants Dryers, standard cubic feet (scf) per hour (annual average) each	Maximum new No. 2 fuel oil for AFI Plants Dryers, gallons/hour (daily average) each.	Fuel Type
078	1,080 (45)	93,000	662	Natural gas, New No. 2 Fuel oil
103	1,200 (50)	93,000	662	Natural gas, New No. 2 Fuel oil

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; Construction Permit 0570008-036-AC/PSD-FL-315]

H.2. Fuels The AFI Plant Nos. 1 and 2 shall be fired with natural gas only, except that new No. 2 fuel oil with a maximum sulfur content of 0.5% (by weight) is allowed as a back-up fuel. No.2 fuel oil shall not be fired for more than 400 hours/yr in each dryer. The permittee shall maintain records of the fuel oil supplier's sulfur content analysis.
[Construction Permits 0570008-028-AC/PSD-FL-234A and 0570008-036-AC/PSD-FL-315]

H.3. Hours of Operations. The hours of operation for AFI Loadout System shall not exceed 3,500 hours per any consecutive 12-month period.
[Rule 62-210.200 Definitions - (PTE), F.A.C.; Construction Permit 0570008-013-AC/PSD-FL-234.]

H.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

H.5. Particulate Matter (PM) and Fluoride (F) Emission Rates. The permittee shall not exceed the following emissions rates:

	PM/PM_{10}			**Fluorides**	
Emission Unit	**Grains per DSCF**	**lb/hr**	**TPY**	**lb/hr**	**TPY**
AFI Plant No. 1	N/A	13	58	N/A	N/A
Defluorination System	N/A	N/A	N/A	2.11	9.25
AFI Plant No. 2	N/A	13	58	N/A	N/A
DE Silo	0.012	0.053	0.23	N/A	N/A
Limestone Silo	0.012	0.32	1.40	N/A	N/A
Loadout System	0.012	2.06	9.01	N/A	N/A
Total for AFI Plant Nos. 1 and 2	N/A	28.72	125.78	2.11	9.25

[Rules 62-296.403(2) and 62-296.705(2)(a), F.A.C.; Construction Permit 0570008-043-AC/PSD-FL-315D]

H.6. Visible Emissions (VE) limit. Visible emissions from emission unit Nos. 078 (AFI Plant No. 1) and 103 (AFI Plant No. 2) shall not exceed 15% opacity. Visible emissions from emission units -079, -080, and -081 shall not exceed 5% opacity.
[Construction Permits 0570008-028-AC/PSD-FL-234A, and 0570008-036-AC/PSD-FL-315]

H.7. Visible Emissions (VE) Limit in lieu of PM Stack Test. Due to the expense and complexity of conducting a stack test on minor sources of particulate matter, and because these sources, the Diatomaceous Earth (DE) Silo, the Limestone Silo, and Loadout System, are equipped with a baghouse control device, the Department, pursuant to the authority granted under Rule 62-296.711(3)(c), F.A.C., hereby establishes a visible emission limitation not to exceed an opacity of 5% in lieu of a particulate stack test.
[Rule 62-296.711(3)(c), F.A.C.; Construction Permit 0570008-013-AC/PSD-FL-234]

Monitoring of Operations

H.8. Reasonable assurance for proper operation of pollution control equipment. In order to provide reasonable assurance that the pollution-control equipment is operating properly, the permittee shall comply with the visible-emissions limitations specified in the attached table of control-device parameters for the AFI plant. In addition, in order to provide reasonable assurance that the pollution-control equipment is operating properly, the permittee shall comply with the minimum and maximum values of pressure drop and water flow-rate that have been established by compliance tests, approved by the Department, and maintained in the Department's file with the current permit. This schedule, which is identified as Table 2, may be revised upon request from the permittee and written approval from the Department.
[Rule 62-213.440(1), F.A.C.]

Pollution Control Equipment	Parameter	Minimum Limitation	Measurement Frequency
DE Silo Baghouse	Visible Emissions	No Visible Emissions	Daily
Limestone Silo Baghouse	Visible Emissions	No Visible Emissions	Daily
Loadout Baghouse	Visible Emissions	No Visible Emissions	Daily

Note: *The venturi/cyclonic scrubber shall be operated at a minimum pressure drop of 15 inches of water. Instances may occur such as low operating rates during which the total pressure drop across the venturi/cyclonic scrubber may be less than the normal rate minimum of 15 inches of water. The permittee shall install, calibrate, operate and maintain monitoring devices that continuously measure and record the total pressure drop across each scrubbing system. Accuracy of the monitoring devices shall be ± 5% over the operating range.*
[Rules 62-4.070, 62-296.800 and 62-212.410, F.A.C.; Construction Permit 0570008-028-AC/PSD-FL-234A.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, 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.9. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of Particulate Matter Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
13A	Determination of Total Fluoride Emissions from Stationary Sources – SPADNS – Zirconium Lake Method – 40 CFR 60, Appendix A
13B	Determination of Total Fluoride Emissions from Stationary Sources – Specific Ion Electrode Method – 40 CFR 60, Appendix A

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

H.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

H.11. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU 078 and 103 shall be tested to demonstrate compliance with the emissions standards for:

a. particulate matter;
b. visible emissions (VE);
c. fluorides (F).

[Rule 62-297.310(7)(a)4, F.A.C.; Construction Permits. 0570008-028-AC/PSD-FL-234A and No. 0570008-036-AC/PSD-FL-315]

H.12. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), EU 079, 080 and 081 shall be tested to demonstrate compliance with the emissions standards for visible emissions (VE).
[Rule 62-297.310(7)(a)4, F.A.C.; Construction Permit 0570008-013-AC/PSD-FL-234]

Recordkeeping and Reporting Requirements

H.13. Additional Test Report Condition. In addition to the attached Appendix RR, Facility-Wide Reporting Requirements, the specific conditions E.14 and E.15 shall also be included in the compliance test reports.
[Rule 62-213.440(1), F.A.C.]

H.14. Scrubber Parameter Report. A summary of the following scrubber operating parameters during any compliance test shall be included in any compliance test report:
a. The scrubber identification;
b. Type of scrubber liquid;
c. Volumetric liquid flow rate (gpm) and;
d. Total gas pressure drop ("w.g.).
[Rule 62-213.440(1), F.A.C.]

H.15. Scrubber Parameter Log. In order to provide reasonable assurance of compliance with Condition H.5., the permittee shall create and keep a record log of the scrubber operating parameters. The record log shall contain, at a minimum:
a. the volumetric liquid flow rate (gallons per minute),
b. the gas pressure drop (inches of water),
c. the date and time of the measurements, and
d. the name of the person responsible for performing the measurements.

A record log entry shall be made at least once per eight hour shift, that the animal feed ingredient plants operate.
NOTE: The permittee may substitute automated monitoring and/or data logging for the manual recordkeeping required by this Condition.
[Rules 62-4.070(4), 62-4.160(14)(b), and 62-4.160(14)(c), F.A.C.; Construction Permit 0570008-013-AC/PSD-FL-234.]

H.16. Certificate of Fuel Oil. If testing is conducted while firing fuel oil in the AFI dryers, compliance with the sulfur content requirement of N.3 shall be demonstrated during the test by submitting either of the following with the test report:

a. A Certificate of Fuel Oil Analysis from your fuel oil vendor for the fuel used during the compliance test; or

b. A Certificate of Fuel Oil Analysis for a fuel oil sample taken during the compliance test.

[Rule 62-213.440(1), F.A.C.]

H.17. Daily Records. In order to document compliance with the requirements of Conditions H.1, H.2 and H.3, the permittee shall maintain daily records of the following:

a. The hours of operation for Animal Feed Ingredient (AFI) Loadout System and Animal Feed Ingredient (AFI) Plant Nos. 1 and 2.

b. The total hours of operation for Animal Feed Ingredient 9AFI) Loadout System in the most recent consecutive 12-month period.

c. The daily average Animal Feed Ingredient Plant Nos. 1 and 2 production rate, tons/hour.

d. The quantity of natural gas and the quantity of No. 2 fuel oil utilized in the AFI dryers.

e. The annual average natural gas usage rate (scf/hr) and the daily average No. 2 fuel oil usage rate (gallons/hr).

f. In order to document continuing compliance with the fuel oil sulfur content Condition No. H.2., records shall be maintained of the sulfur content, in % by weight, and the amount of No. 2 fuel oil delivered for use in the dryer. On the basis of the requirements of the Department of Agriculture and Consumer Services Rule 5F-2.001 (which requires that No. 2 fuel oil sold in Florida have a maximum sulfur content not to exceed 0.5%.), reasonable assurance that the sulfur content requirement is being met can also be provided through vendor supplied documentation that the fuel oil delivered for use in these dryers meets the specifications for No. 2 fuel oil. The above records shall be maintained and made available to the Department and EPCHC upon request.

g. The total hours of operation for the AFI dryers using No. 2 fuel oil.

These records shall be recorded in a permanent form suitable for inspection by the Department and the EPCHC upon request.

[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-036-AC/PSD-FL-315.]

H.18. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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

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

E.U. ID No.	Brief Description
-109	Clarifier and Storage Tanks

This subsection applies to the Clarifier and Storage Tanks. The description and capacity of the tanks are shown in the table below:

SL No.	Description	Capacity (gallons)
1.	30% Clarifier	297,000
2.	43% Clarifier	297,000
3.	54% Clarifier	297,000
4.	30% Clarifier Feed Tank	400,000
5.	43% Clarifier Feed Tank	60,000
6.	54% Clarifier Feed Tank	80,000
7.	300 K Gallon 30% Storage Tank	300,000
8.	East PFS (phosphate fertilizer solution) Dock Storage Tank (54%)	754,000
9.	West PFS (phosphate fertilizer solution) Dock Storage Tank (54%)	754,000

This emission unit has low fluoride emissions, which satisfies a portion of the criteria to be insignificant found in Rule 62-213.430(6)(b)3.d., F.A.C. However, it is not considered insignificant because the emission unit does not simultaneously satisfy Rule 62-213.430(6)(b)1., F.A.C., which requires that the unit not be subject to any unit-specific applicable requirement.

The Clarifier and Storage Tanks are regulated under 62-296.403(1)(a), F.A.C., which is a unit-specific applicable requirement.

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}

I.1. Fugitive Emission Calculation Method. The emission unit does not have any pollution control equipment and emits fugitively. So, the emission unit will have to show compliance with the rule requirement by doing an engineering estimate of fluoride emission from the clarifiers and storage tanks and adding that to the fluoride emissions from the phosphoric acid production facility. The sum of the emissions has to be less than 0.02 lb/ton of P_2O_5 input to the system.
[Rule 62-296.403(1)(a), F.A.C.]

Recordkeeping and Reporting Requirements

I.2. Fluoride (F) Emission Calculation. Prepare an engineering estimate for fluoride of the Clarifers, Feed and Storage Tanks during each federal fiscal year (October 1 – September 30) using the most current U.S. EPA Tanks program. Submit the estimate alongwith the fluoride emissions from the phosphoric acid production facility.
[Rules 62-296.403(1)(a) and 62-4.070(3), F.A.C.]

I.3. Fluoride (F) Emission Record. This emission unit shall maintain its recordkeeping of fluoride emissions (engineering estimate) along with the phosphoric acid manufacturing plant fluoride emission recordkeeping. These records shall be recorded in a permanent form suitable for inspection by the Department or the Hillsborough County Environmental Protection Commission (HCEPC) upon request.
[Rules 62-296.403(1)(a) and 62-4.070(3), F.A.C.]

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

E.U. ID No.	Brief Description
-104	Phosphogypsum Stack North (No. 1)
-108	Phosphogypsum Stack South (No. 2)

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

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

{Permitting Note: See Appendix "NESHAP-40 CFR 61 Subpart A" and "Appendix NESHAP-40 CFR 61 Subpart R".}

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

E.U. ID No.	Brief Description
-075	AP Storage Buildings 2, 4, 5 & 6
-076	AP Loadout Between Storage Buildings 2 & 4
-077	AP Loadout Adjacent to Storage Building 6

Ammoniated phosphate (AP) product from No. 5 ~~Granulation~~ AP Plant (EU No. 055) and No. 6 AP Plant (EU No. 007) is transferred to AP Storage Building Nos. 2, 4, 5 & 6. These storage buildings store, handle and loadout AP product to conveyors and associated transfer equipment, such as bulk toters, feed and loadout elevators, mini bin system, and ribbon blender to load ships, barges, railcars, trucks and containers. The capacity of the storage buildings 2, 4, 5, and, 6 are approximately 38,000, 33,000, 40,000, and, 58,000 tons respectively.

Dust is controlled by enclosing conveyors, transfer points and applying coating oil to the AP Product prior to being stored and loadout.

Essential Potential to Emit (PTE) Parameters

K.1. Permitted Capacity:

a. The maximum AP transfer rate to the Nos, 2, 4, 5 & 6 storage buildings shall not exceed 8,237 tons per day (343.2* tons per hour, daily average) and 3,006,432 tons per any consecutive 12-month period.
b. The maximum AP Railcar/Truck/Container loadout from the Nos. 2, 4. 5 & 6 storage buildings shall not exceed 1,000 tons per hour (daily average) from each loadout station and 3,006,432 tons (combined) per any consecutive 12-month period.

*{Permitting Note: * based on the Permitted production capacities of No. 5 ~~Granulation~~ AP Plant and No. 6 AP Plant}*
[Rule 62-210.200(PTE), F.A.C.; and, Construction Permit 0570008-067-AC]

K.2. Hours of Operation: These emission units may operate continuously (8,760 hours per year).
[Rule 62-210.200(PTE), F.A.C.; Construction Permit 0570008-067-AC]

K.3. Methods of Operation: Ammoniated Phosphate (AP) shall be coated with a dust suppressant.
[Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Construction Permit 0570008-067-AC]

K.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.
[Rule 62-297.310(2), F.A.C.]

Emission Limitations and Standards

{*Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this Permit.}*

K.5. Visible Emission (VE) Standards: The permittee shall not cause, allow or permit any visible emissions (>5% opacity) from each of the material handling points, including loading and unloading stations, storage buildings and material transfer points. If this level is exceeded, then the Department or Hillsborough County Environmental Protection Commission (HCEPC) may require that additional dust control measures be implemented.
[Hillsborough County Code 1-3.52; Construction Permits 0570008-052-AC and 0570008-067-AC]

Monitoring of Operations

K.6. Dust suppressant monitoring: The type and amount of dust suppression oil used shall be monitored during each compliance test, and a summary of this data shall be included in each emissions test report.
[Rule 62-297.310(8), F.A.C.; Construction Permit 0570008-067-AC]

Test Methods and Procedures

{Permitting Note: The attached Table 2, 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.7. Test Methods. Required tests shall be performed in accordance with the following reference method:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.
[Rule 62-297.401, F.A.C.]

K.8. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit.
[Rule 62-297.310, F.A.C.]

K.9. Annual Compliance Tests Required. During each federal fiscal year (October 1st to September 30th), each of the storage buildings and loadout stations shall be tested to demonstrate compliance with the emissions standard for visible emissions.
[Rule 62-297.310(7), F.A.C.]

K.10. Compliance Tests for changing of dust suppressant: The permittee shall conduct a visible emissions performance test within 30 days of changing the type(s) or brand of dust suppression oils used at the material storage/handling/loadout system.
[Rule 62-4.070(3), F.A.C.; Construction Permit 0570008-067-AC]

Recordkeeping and Reporting Requirements

K.11. Additional Test Report Condition. In addition to the attached Appendix RR, Facility-Wide Reporting Requirements, the specific conditions K.11 and K.12 shall also be included in the compliance test reports.
[Rule 62-213.440(1), F.A.C.]

K.12. Test Report Documents and Requirements. The test report shall at a minimum include the following:

a. The specific type of dust suppression oil used (include a MSDS sheet on this material if available);
b. The point of application of the dust suppression oil, the minimum rate at which it will be applied, and a description of how the rate of application will be controlled and measured (for the purposes of recordkeeping); and,

c. Statement of the results of observation of visible emissions from transfer and loading/unloading points when dust suppression oil is being applied at the minimum rate.

All test reports shall include a statement of the type dust suppressant (coating oil) being used on AP during test. The permittee shall notify HCEPC within 15 business days of switching dust suppressant (coating oil) to know when the 30th day occurs.
[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-052-AC]

K.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
[Rule 62-4.070(3), F.A.C.]

K.14. Recordkeeping: In order to document compliance with the specific condition K.1., the Permittee shall maintain the records of the following information:

a. Facility Name, Facility ID No. (0570008), EU ID Nos. (075, 076 and 077) & Description;
b. When operating, Daily, record hours of operation of AP transferred to AP Storage Buildings 2, 4, 5 & 6;
c. When operating, Daily, record the combined quantity of the amount of AP transferred, tons;
d. When operating, Daily, record the AP transfer rate, tons/hour (daily average);
e. When operating, Daily, record the hours of operation of AP loaded out from each loadout station;
f. When operating, Daily, record the amount of AP loaded out from each loadout station, tons;
g. When operating, Daily, record the AP loadout rate from each loadout station, tons/hour (daily average);
h. Monthly, calculate the quantity, in tons, of AP transferred to the AP Storage Building Nos. 2, 4, 5 & 6 (12-month rolling total);
i. Monthly, calculate the quantity, in tons, of AP loaded out from each loadout station (12-month rolling total);
j. Monthly, calculate the quantity, in tons, of AP loaded out from both loadout stations (12-month rolling total);
k. for each period of operation, a statement of whether dust suppressant oil was being applied to the product being processed; and,
l. for each period when dust suppressant oil was being used to control particulate emissions, a description of, and rate of application of the suppressant oil in gpm and gal/ton of material handled.

The daily log must be completed within 5 business days and monthly records shall be completed within 15 days of the end of the current month and shall be retained at the facility for a minimum of five (5) years and shall be made available to the Department and the Environmental Protection Commission of Hillsborough County (EPCHC) upon request.
[Rule 62-213.440(1), F.A.C.; Construction Permit 0570008-067-AC]

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-111	Emergency Diesel Engines (Existing stationary RICE)

This emissions unit consists of the following Emergency Diesel Engines:

Description	Manufacturer	Model No.	Power (bhp)	Date of Construction
Administration Building	Caterpillar	3406	420	Prior to June 12, 2006
TGI	Caterpillar	3208	210	Prior to June 12, 2006
Environmental MCC	Caterpillar	3406	420	Prior to June 12, 2006
Outfall 005	Detroit	5043-7001	140	Prior to June 12, 2006
# 1 South Toe Drain	Perkins	1795/1500	47	Prior to June 12, 2006
# 15 North Toe Drain	Perkins	1795/1500	47	Prior to June 12, 2006

***NOTE - IMPORTANT REGULATORY CLASSIFICATIONS* -**

This Title V facility contains emergency stationary compression ignition (CI) internal combustion engines (shown below) that have been exempted from the requirements to obtain an air construction permit because these qualify for the categorical exemptions listed in Rule 62-210.300(3)(a), F.A.C. (specifically, Rule 62-210.300(3)(a)35. F.A.C. (Emergency Generator and General Purpose internal combustion engines and other RICE). However, these engines are included in this permit as regulated emission units because, based on their date of manufacture/construction, they are subject to federal rule NESHAP 40 CFR 63 Subpart ZZZZ (National Emission Standards of Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE).

Federal Rule Requirements

L.1. 40 CFR 63, Subpart ZZZZ Requirements. The emergency diesel engines included in this emissions unit are subject to the applicable requirements contained in 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines and 40 CFR 63, Subpart A - General Provisions. The applicable requirements for each engine (based on category and HP rating) are shown in Appendix NESHAP - 40 CFR 63, Subpart ZZZZ - Summary of Requirements.

*{**Permitting Note:** See "Appendix NESHAP-40 CFR 63, Subpart A" and "Appendix NESHAP-40 CFR 63, Subpart ZZZZ"}*

[Rule 62-4.070(3), F.A.C.; 40 CFR 63 Subpart A and 40 CFR 63 Subpart ZZZZ]

Essential Potential to Emit (PTE) Parameters

L.2. Hours of Operation. The permittee must operate this emissions unit according to the requirements in 40 CFR 63.6640(f)(1) through (3). In order for each engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year (per engine), as described in 40 CFR 63.6640(f)(1) through (3), is prohibited. If each engine is not operated according to the requirements in 40 CFR 63.6640(f)(1) through (3), the engines will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines.

For each engine listed in this emissions unit:

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) Operation of emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640(f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year is allowed. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) of this section counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2).

(i) - Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) - Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) - Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[Rule 62-210.200 (Potential to Emit), F.A.C., 40 CFR 63.6640(f)]

*{**Permitting Note:** Specific Condition Nos.L.3. through L.13 are applicable for the Existing Engines ≤ 500HP only.}*

General Requirements for Existing Engines ≤ 500HP

L.3. Work or Management Practice Standards. The permittee shall comply with the requirements listed in the following table for each engine.

For each…	You must meet the following requirements except during periods of startup…	During periods of Startup you must …
1. Emergency stationary CI RICE and black start stationary CI RICE [1]	a. Change oil and filter every 500 hours of operation or annually, whichever comes first.[2] b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.[3]	Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.[3]

[1] If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63, Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. Compliance with the numerical emission limitations established in this subpart is based on the results of testing the average of three 1-hour runs using the testing requirements and procedures in 40 CFR 63.6620 and Table 4 to this subpart.

[2] Sources have the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in the table above (i.e., applicable requirements from Table 2c of 40 CFR 63, Subpart ZZZZ).

[3] Sources can petition the Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices.

[40 CFR 63.6602 and 40 CFR 63, Table 2c]

Monitoring of Operations for Existing Engines ≤ 500HP

L.4. General Maintenance. The permittee must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.
[40 CFR 63.6625(e)]

L.5. Hour Meter. A non-resettable hour meter must be installed if one is not already installed.
[40 CFR 63.6625(f)]

L.6. Time Spent at Idle. The permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 40 CFR 63, Subpart ZZZZ, Table 2c (i.e., Specific Condition No. K.3) to this subpart apply.
[40 CFR 63.6625(h)]

L.7. Optional Oil Analysis Program. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in 40 CFR 63, Subpart ZZZZ, Tables 2c (i.e., Specific Condition No. K.3). The oil analysis program must be performed in accordance with the requirements of 40 CFR 63.6335(i).
[40 CFR 63.6625(i)]

Compliance for Existing Engines ≤ 500HP

L.8. Continuous Compliance. Each unit must be in compliance with the applicable Work or Management Practice Standards of Specific Condition No. K.3. at all times.
[40 CFR 63.6605(a)]

L.9. Operation and Maintenance of Equipment. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 CFR 63.6605(b)]

L.10. The permittee must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Specific Condition No. K.3. that apply to you according to methods specified in 40 CFR 63, Subpart ZZZZ, Table 6.
[40 CFR 63.6640(a)]

L.11. The permittee must also report each instance in which the applicable requirements in 40 CFR 63, Subpart ZZZZ, Table 8 were not met.
[40 CFR 63.6640(e)]

Recordkeeping and Reporting Requirements for Existing Engines ≤ 500HP

L.12. Maintenance Plan Records. You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan.
[40 CFR 63.6655(e)]

L.13. Hours or Operation Records. If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the nonresettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in 40 CFR 63.6640(f)(2)(ii) or (iii) or 40 CFR 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) An existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions that does not meet the standards applicable to nonemergency engines.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[40 CFR 63.6655(f)]

Subsection M. Common Conditions

Hours of Operation. Hours of operations for all emission units are 8,760 hour/yr each, unless otherwise noted in the EU Sections.

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-007	No. 6 AP Plant
-055	No. 5 ~~Granulation~~ AP Plant
-073	Phosphoric Acid Production Facility

NESHAP CONDITIONS FOR E.U. Nos. 007 & 055

M.1. The Permittee shall achieve compliance with the requirements of 40 CFR 63, Subpart BB no later than June 10, 2002. The Permittee became subject to NESHAP alternate monitoring plan per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B).
[40 CFR 63.630(a), Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B)]

M.2. This emissions unit is exempted from the requirements in NSPS, 40 CFR 60, Subpart V effective upon the date that the Permittee demonstrates compliance with 40 CFR 63 Subpart BB.
[40 CFR 63.631]

M.3. This emissions unit is subject to specific requirements in the 40 CFR 63, Subpart A – General Provisions, which are located in Subsection Q. NESHAP Common Conditions.
[40 CFR 63, Appendix A of Subpart BB]

M.4. The Permittee must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant the requirements of 40 CFR 63.625(f)(1) or 63.625(f)(2).
[40 CFR 63.624]

M.5. 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 $\pm$ 5 % over its operating range.
[40 CFR 63.625(a)]

M.6. The Permittee shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.625(b) and then by proceeding according to 40 CFR 63.626(c)(3).
[40 CFR 63.625(b)]

M.7. The Permittee shall install, calibrate, maintain, and operate the following monitoring systems:

A. Pressure Drop. 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 $\pm$ 5% over its operating range.

B. Scrubbing Liquid Flow Rate. 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 % over its operating range.

C. Fan Amperage. A monitoring system that continuously monitor fan amperage for each fan in the scrubbing system.

[40 CFR 63.625(c), and Administrative Order No. 03-C-AP for alternate monitoring plan]

M.8. 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 (f)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.626(c)(4) or (d)(4). 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.

[40 CFR 63.625(f)]

M.9. The Permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.626(c), based on the equivalent P_2O_5 feed rate computed as indicated in 40 CFR 63.626(c)(3).

[40 CFR 63.626(c)]

M.10. The Permittee must comply with the notification requirements in 40 CFR 63.9 and the reporting and recordkeeping requirements in 40 CFR 63.10. The reporting requirements in 40 CFR 63.10 include the initial and annual performance test reports, excess emissions reports, and the summary report.
[40 CFR 63.627]

NESHAP CONDITIONS FOR E.U. No. 073

M.11. The Permittee shall achieve compliance with the requirements of 40 CFR 63, Subpart AA no later than June 10, 2002. The Permittee became subject to NESHAP alternate monitoring plan per Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B).
[40 CFR 63.609(a), Administrative Order No. 03-C-AP dated 1/5/2004 (Attachment B)]

M.12. This emissions unit is exempted from the requirements in NSPS, 40 CFR 60, Subpart T effective upon the date that the Permittee demonstrates compliance with 40 CFR 63, Subpart AA.
[40 CFR 63.610]

M.13. This emissions unit is subject to specific requirements in the 40 CFR 63, Subpart A - General Provisions, which are located in Subsection Q. NESHAP Common Conditions.
[40 CFR 63, Appendix A of Subpart AA]

M.14. 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 with in the allowable ranges established pursuant to 40 CFR 63.605(d)(1) or (2).
[40 CFR 63.604]

M.15. The permittee shall install calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of the phosphorus-bearing feed to the process. The monitoring system shall have an accuracy of ±5 % over its operating range.
[40 CFR 63.605(a)]

M.16. The permittee shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate of the phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.605(a) and using the calculation method of 40 CFR 63.606(c)(3).
[40 CFR 63.605(b)(1)]

M.17. The permittee shall install, calibrate, maintain, and operate the following monitoring systems:

- **A. Pressure Drop.** 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 % over its operating range.
- **B. Scrubbing Liquid Flow Rate.** 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 % over its operating range.
- **C. Fan Amperage**. A monitoring system that continuously monitor fan amperage for each fan in the scrubbing system.

[40CFR 63.605(c); Administrative Order No. 03-C-AP for alternative MACT monitoring plan]

M.18. 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 (d)(1) or (2) of this section:

(1) The allowable range for the daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system is ±20 percent of the baseline average value determined as a requirement of §63.606(c)(4), (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.

(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.
[40 CFR 63.605(d)]

M.19. The permittee shall determine compliance with the total fluorides standard as required in 40 CFR 63.606(c), based on the equivalent P_2O_5 feed rate computed as indicated in 40 CFR 63.606(c)(3).
[40 CFR 63.606(c)]

M.20. The permittee must comply with the notification requirements in 40 CFR 63.9 and the reporting and recordkeeping requirements in 40 CFR 63.10. The reporting requirements in 40 CFR 63.10 include the initial and annual performance test reports, excess emissions reports, and the summary report.
[40 CFR 63.607]

REVISED NESHAP CONDITIONS FOR E.U. Nos. 007 & 055

M.21. The 2 emissions units listed above shall comply with **Appendix 40 CFR 63 Subpart BB** attached to this permit and common conditions **M.1. – M.10**.with the exception in **M.8**. as noted below. The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or BB upon the effective date in the final promulgated rule. Subsequently, this permit will be reopened to incorporate any applicable updates in accordance with Rule 62-213.430(4), F.A.C.

The approval process as described in federal regulation at 40 CFR 63.625(f)(1) & (f)(2) specifically,

> "*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."*

is replaced with:

> "Upon establishment of a new operating range the permittee shall operate under the new range. If the compliance authority has reason to believe the compliance test was not done properly then the compliance authority shall require a special compliance test pursuant to Rule 62-297.310(7)(b), F.A.C."

[Rule 62-213.440(1)(b)1.a., F.A.C. and Rule 62-297.310(7)(b), F.A.C.]

REVISED NESHAP CONDITIONS FOR E.U. No. 073

M.22. The emissions unit listed above shall comply with **Appendix 40 CFR 63 Subpart AA** attached to this permit and common conditions **M.11. – M.20**. with the exception in **M.18**. as noted below. The owner or operator is responsible for remaining in compliance with any updates made to Subpart A or AA upon the effective date in the final promulgated rule. Subsequently, this permit will be reopened to incorporate any applicable updates in accordance with Rule 62-213.430(4), F.A.C.

The approval process as described in federal regulation at 40 CFR 63.605(d)(1) & (d)(2) specifically,

> "*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*."

is replaced with:

> "Upon establishment of a new operating range the permittee shall operate under the new range. If the compliance authority has reason to believe the compliance test was not done properly then the compliance authority shall require a special compliance test pursuant to Rule 62-297.310(7)(b), F.A.C."

[Rule 62-213.440(1)(b)1.a., F.A.C. and Rule 62-297.310(7)(b), F.A.C.]

The specific conditions in this section apply to the following emissions units:

EU No.	Brief Description
-113	~~New~~ Non-Emergency Diesel Engines (~~New s~~Stationary CI ICE)

This emissions unit consists of the following Non-Emergency Diesel Engines:

Description	Manufacturer	Model No.	Power (bhp)	Date of Construction
Collection Sump Pump A	Deutz	D914L04	105, <10 litres per cylinder	Post 2007
Collection Sump Pump B	Deutz	D914L04	105, <10 litres per cylinder	Post 2007
Line Sludge Removal Pump	John Deere	8843685	76, <10 litres per cylinder	Post 2007
South Stormwater Swale Pump	John Deere	6090HF48	400, <10 litres per cylinder	Post 2007
Warehouse Area Stormwater Retention Pond Pump	Crescent		100, <10 litres per cylinder	Post 2007

Federal Rule Requirements

N.1. 40 CFR 60, Subpart IIII Requirements - The non-emergency diesel engines included in this emissions unit are subject to the applicable requirements contained in 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE) and 40 CFR 60, Subpart A - General Provisions. The applicable requirements for each engine (based on category and HP rating) are shown in Appendix NSPS - 40 CFR 60, Subpart IIII - Summary of Requirements.

{**Permitting Note:** See "Appendix NSPS-40 CFR 60, Subpart A" and "Appendix NSPS-40 CFR 60, Subpart IIII"}

[Rule 62-4.070(3), F.A.C.; 40 CFR 60 Subpart A and 40 CFR 60 Subpart IIII]

NOTE - IMPORTANT REGULATORY CLASSIFICATIONS -

This Title V facility contains emergency stationary compression ignition (CI) internal combustion engines (shown above) that have been exempted from the requirements to obtain an air construction permit because these qualify for the categorical exemptions listed in Rule 62-210.300(3)(a), F.A.C. (specifically, Rule 62-210.300(3)(a)35 ~~and 36~~, F.A.C. (Emergency Generator and General Purpose internal combustion engines and other RICE). However, these engines are included in this permit as regulated emission units because, based on their date of manufacture/construction, they are subject to federal rule NSPS 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE).

Essential Potential to Emit (PTE) Parameters

Emission Standards

N.2. Emission Standards for Non-Emergency CI ICE - Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later CI ICE, as applicable.
[40 CFR 60.4204]

N.3. Certification Emission Standard for Non-Emergency Stationary CI ICE - Stationary CI internal combustion engine owners and operators must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new non-road CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.
[40 CFR 60.4201 and 40 CFR 60.4204]

N.4. Fuel Requirements - Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. The requirements of 40 CFR 80.510(c) are: Sulfur: 15 ppm max; Min Cetane Index: 40; and Max aromatic content: 35% volume percent.
[40 CFR 60.4207]

Monitoring Requirements for Non-Emergency Engines

N.5 Particulate Filter - If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.
[40 CFR 60.4209(b)]

Compliance for Non-Emergency Engines

N.6. Continuous Compliance - Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.
[40 CFR 60.4206]

N.7. Compliance Requirements -

1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;

2) Change only those emission-related settings that are permitted by the manufacturer;

3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you;

4) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

[40 CFR 60.4211]

Recordkeeping and Reporting Requirements

N.8. Corrective Action Record - If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
[40 CFR 60.4214]

SECTION IV. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix CAM, Compliance Assurance Monitoring Plan.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NSPS – 40 CFR 60 Subpart A – General Provisions.
Appendix NSPS – 40 CFR 60 Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
Appendix NSPS – 40 CFR 60 Subpart H – Standards of Performance for Sulfuric Acid Plants (SAPs)
Appendix NSPS – 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression-Ignition Internal Combustion Engines
Appendix NSPS – 40 CFR 60, Subpart IIII – Summary of Requirements.
Appendix NESHAP – 40 CFR 61 Subpart A – General Provisions.
Appendix NESHAP – 40 CFR 61 Subpart R – National Emission Standards for Radon Emissions from Phosphogypsum Stacks
Appendix NESHAP – 40 CFR 63 Subpart A – General Provisions
Appendix NESHAP – 40 CFR 63 Subpart AA – NESHAP for Phosphoric Acid Manufacturing Plants
Appendix NESHAP – 40 CFR 63 Subpart BB – NESHAP for Phosphate Fertilizer Production Plants
Appendix NESHAP – 40 CFR 63, Subpart DDDDD – NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters.
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – RICE Summary of Requirements
Appendix NESHAP – 40 CFR 63 Subpart ZZZZ – RICE Inventory and Facility Applicable Requirements
Appendix U, List of Unregulated Emissions Units and/or Activities.
Appendix RR, Facility-wide Reporting Requirements.
Appendix TR, Facility-wide Testing Requirements.
Appendix TV, Title V General Conditions.

REFERENCED ATTACHMENTS.

The Following Attachments Are Included for Applicant Convenience:

Referenced Attachments

Attachment A: Memorandum of Understanding Regarding Best Operational Start-up Practices for SAPs
Attachment B: Alternate MACT Monitoring Plan, Administrative Order 03-C-AP (Signed on 01/05/2004)
Figure 1, Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance (40 CFR 60, July, 1996).
Table H, Permit History.
Table 1, Summary of Air Pollutant Standards and Terms.
Table 2, Compliance Requirements.
Table CAM – CAM Applicability
Statement of Basis